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Harvard Medical
ALUMNI BULLETIN

Cover photo and feature openers
by Stuart Darsch
Art direction by Will Cook
Photo of Lewis Thomas
by Jennifer Waddell

Inside HMAB

In past years the *Bulletin* has devoted issues to the artists and poets among us. In similar vein, this issue is given over to short creative pieces and essays by nine recent graduates who have made their mark as successful authors, in addition to professional careers as physicians.

By happenstance this issue coincides with the death of Lewis Thomas '37, certainly one of Harvard Medical School's most thought-provoking essayists and philosophers. Lester Grant '55, a longtime colleague of Thomas leads off with a personal memoir of his close friend. Michael LaCombe's '68 unusual close encounter follows.

In the sampler of short stories and essays that make up the body of the issue, Elissa Ely '88 contemplates DNR from the viewpoint of the "incompetent" patient; Paul Buttenwieser '64 returns to his residency years and the tangled web that comes from answering a phone call in the emergency room; Stephen Bergman '73, aka Samuel Shem, brings the historical perspective of the '60s to his important, if controversial novel, *The House of God*. Then come two samples of our most recent alumni, Raphael Campo's '91 poetry and Ethan Canin's '92 story of an elderly woman and her birds that might challenge Poe's raven. Perri Klass '88 nicely involves the reader in the fantasies of a doctor's marriage, Vicky McEvoy '75 offers some down-to-earth advice for budding authors and Melvin Konner '85, a professor of anthropology at Emory University who came late to medical school, looks back on his medical curriculum now that he has returned to academe. And finally, to complete the sampler,Terri Rutter, acting managing editor for this issue, discusses creativity among medical students with Robert Coles.

Terri Rutter admirably assumed the role of acting managing editor for this issue. Ellen Barlow, at home following the birth of her second son, has returned just in time for the forthcoming Alumni Day/Class Day issue. Sarah Nelson contributes a profile on Ellen Waitzkin '81, and your editor approaches his 14th-year milepost, *tempus fugitum est.*

Gordon Scannell '40

Harvard Medical
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Letters

From Ones Older and Wiser

Your issue on aging was a delight (Winter 1993/94). However, this querulous old gynecologist feels that certain matters need attention.

You identify Oliver Wendell Holmes as "the scientist who identified the nature and cause of puerperal fever." To do so is to ignore the distinguished contributions of Ignaz Semmelveis, who, in that day of slow communication, did for Europe what Holmes did for America.

On page 28, hormone replacement therapy for elderly women receives short shrift. Yet, every gynecologist has long known that estrogen replacement, despite its (greatly exaggerated) drawbacks, is the backbone (sic) of osteoporosis prevention and therapy in these patients. Moreover, many physicians believe that the femoral neck collapses before the fall, not during or afterward.

Also, on page 28, we find that "most cases of incontinence can be treated inexpensively and effectively." The gynecologists and urologists who have devoted many years to this problem will be pleased to know that it has been solved.

Finally on page 37, you refer to "English humorist P.J. Woodhouse." You are most likely referring to P.G. Wodehouse.

Bruce A. Harris Jr. '43A

Your Winter 1993/94 issue was certainly a source of education and even some inspiration for us octogenarians. May I, however, pose a caveat implied but not fully spelled out in the articles. Time, which most certainly operates to heal, does not do so instantaneously.

When we lose a spouse, our friends tell us that the grief will pass. And although it usually does, it happens neither the next day nor the next week. When we retire from one chore or another, we cannot expect dramatic or immediate adjustment.

The "shortened steps" apply, therefore, both to the extent and speed of our activities but also to our expectations. Like our ability to heal bones, the ability to change our attitudes, our psychic abilities and our sense of internal comfort, proceeds at a modified tempo.

This is hard on the active among us, especially if our professional lives have been associated with more dramatic healing phenomena. The healing of the mind, the soul and the spirit does come about, but the time that heals is a chronically acting drug and we had best be warned thereof.

And thank you for the vignette of my teacher Burt Wolbach, and of one of my mentors, Sydney Farber.

Henry Work '37

And Young Ones Enthralled

As soon as a new issue of the *Bulletin* arrives, I turn with glee to the Alumni Notes. After a quick scan for familiar names among the recent graduates, I flip back to the notices of the old guard—the older the better actually, since the earlier in the century the correspondent graduated, the greater my delight.

Crystallized in those entries are telling characteristics of physicians (whose conformations to type are as intriguing as their departures from popular stereotype are assured). Perhaps it is not surprising that many HMS grads of the '10s, '20s and '30s feel obliged to include personal and family health updates, but they seem impelled to elucidate by means of technical details: pathologic stage and grade, percent obstruction, pulmonary capillary wedge pressure and that most felicitous of postoperative comments, "excellent result."

Physicians reveal themselves not only in their blurring of the distinction between family story and case report, but in their ceaseless enthrallment with medicine, as well. No matter how much fishing, golfing and grandparenting are reported, nearly all the alumni reveal with relish that they attend grand rounds, teach second-year students how to percuss the skull, or are completing an 800-page monograph on the care of the spleen.

The compulsions to divulge their own medical histories and to avoid complete retirement dovetail in the subset of notes that read something like, "Recovering from third stroke and second below-the-knee amputation, but still manage to operate one morning a week." (I would not be so churlish as to quote verbatim, so if this example fits any actual HMS graduate it is merely an accident of plausibility.)

Reading the pre-World War II alumni notes gives me the sense of a tighter affinity with those writers than mere coincidence of schooling; and reassures me that although I recently completed my residency with a strong urge to retire, the flame of my fascination for medicine will undoubtedly burn as far into the next century as it is my privilege to practice.

Benjamin Scheindlin '90

Letters

Spiritual Aging

Being 70 years of age and recently retired from practice as a general and thoracic surgeon, I read with keen interest the articles on aging, published in the Winter 1993/94 issue of the *Bulletin*.

They were stimulating and certainly indicative of the potential that some of us possess for continued contributions to society and to our families. It is fascinating to compare the paths we are led to follow. I am concerned, however, that there was relatively little emphasis relating to spiritual interests and growth.

One of the special differences of human beings from other animals is our spirit, and we have tended to neglect the influence of the spirit on human physiology and pathology. The teaching we receive does little to encourage our own spiritual realization and growth. Many of us enter old age bereft of spiritual strength, with limited power to meet the challenges of physical and mental decline in ourselves, family and friends.

Despite all the "scientific" medical discoveries we can claim, there may be more diseases now than ever before: more violence, more fear, more dysfunctional families and more moral decay. Humanism is not working. There is increasing evidence that the neuro-immuno-endocrine system responds favorably to the gifts of the spirit.

It is possible to grow old with more grace, confidence and peace than when we were young. It is also possible to find answers to the questions we let go unanswered regarding life's purposes.

Old age can certainly offer opportunities in continued secular activities, but for many it offers the unhurried opportunity to grow in wisdom and grace, and to pass it on to a suffering world and to our families.

When E. Stanley Crawford '46 received the prestigious John Homans Lectureship presented by the Society for Vascular Surgery in 1991, his marvelous physique had been decimated by hemiplegia and he was soon to die of cancer. Yet in his lecture, which was presented by his son, John Lloyd Crawford II, he quoted Isaiah 40:31: "But they that wait upon the Lord shall renew their strength; they shall mount up with wings as eagles; they shall run, and not be weary; and they shall walk, and not faint."

Issac V. Manly '46

Anecdote of Folin Antics

Do you remember Professor Otto Folin lecturing on biochemistry? He would hold up a test tube of urine from a diabetic, place his middle finger over the open end, tip the tube then taste his fourth finger. At that point he would pass the tube of urine to the students, each of whom would place his index finger over the end of the tube, tip it and then taste the index finger, not noting that Folin had switched fingers!

He would then gleefully announce this fact.

John R. Parish '31

Pulse

A Discovery in Hand

Something very small has created a very big noise, one on the scale of, say, a sonic boom. It's a sound heard around the world as it begins to answer the questions: What makes a pinkie finger instead of a thumb? Indeed, what turns a limb bud into a hand instead of into a foot? And yet, in scale and size, this new wonder is small enough so that each of us can hold it, literally, in the palm of our hand.

Clifford Tabin, HMS assistant professor of genetics, has discovered in vertebrates the gene that determines the development of limb formation. Dubbed Sonic hedgehog, the gene is located at the limb bud. It releases proteins, called morphogens, which move out across the nondescript lumps of tissue and along the way, deposit information that tells certain spots what to become: arm or leg, finger or toe. Like a burst of lava, morphogens are more concentrated near the point of release and then spread thinner as they move away from their source; this concentration gradient determines the information given. For example, in the hand, the pinkie is closer to the wellspring, while the thumb develops from the droplets at the end.

"Limb development has been a model for understanding how patterning is controlled during the development of an organism," says Tabin. "The discovery of a key signal in the patterning of the limb opens the way to understanding that paradigm at a much deeper level."

Tabin, whose research is funded by the National Institutes of Health, discovered the architect gene in chickens; his findings appeared in the December 31, 1993 issue of *Cell*. Harvard University biologist Andrew P. McMahon and his research team subsequently located Sonic hedgehog in mice, and a group of researchers led by

Philip Ingham at the Imperial Cancer Research Fund in Oxford made the discovery in zebra fish. Their findings are published in the same issue.

The discovery of Sonic hedgehog is the latest development in research that began 30 years ago when scientists pointed to sites at the limh bud they believed acted as signaling centers for the development of body segments. Some 20 years later, these sites were isolated in *Drosophilia* larvae, and the genes that actually act as the signals were discovered. (They were called hedgehog because the flies with mutations in these genes resembled the small, spiny animal.)

The big questions since then have been: Does the same mechanism work in vertebrate animals as it does in the fruit fly? And, if so, does it operate the same way in human beings as it does in other animals? Tabin's work answers affirmatively to the first question and projects almost definitely that the same is true for the second.

Of course, a great discovery leads to more unanswered questions, and this is no exception. The next step is to uncover the mysteries of the process of morphogenesis: What activates Sonic hedgehog? What is the molecular make up of the protein? How, more precisely, does the gradient function—why does the thumb require less protein than the pinkie? Are there receptors along the protein's path? How does Sonic hedgehog interact with the Hox genes, the other great genetic bodybuilders? And perhaps most evocatively: Does the same gene that decides the fate of a wing, a paw or a fin also create the human hand?

Intriguing clinical implications of this discovery are just beginning to be discussed. It may lead to better treatments for head and spinal cord injury and, in an article about Sonic hedgehog in the *New York Times*, McMahon suggests it may enlarge scientific understanding of the central nervous system and neurological regeneration.

"The significance of this discovery is that you can now seek answers to questions you couldn't ask before," says Tabin.

From left: Randy Johnson, Ed Laufer, Cliff Tabin and Bob Riddle.

photo by Barbara Steiner

Pulse

photo by Barbara Steiner

Judah Folkman

Discovery May Lead to Simple Test for Cancer

HMS researchers have discovered that high levels of a protein called fibroblast growth factor (FGF) can signal the extent and vigor of a variety of cancers. These findings raise the possibility that a simple blood or urine test could guide the treatment of selected patients in the future.

"Elevated levels of FGF correlated significantly with the progress or spread of the cancer and the risk of death," said Judah Folkman '57, HMS Julia Dyckman Andrus Professor of Pediatric Surgery and a researcher at Children's Hospital, who with Mai Nguyen '88, a surgical resident at Brigham and Women's Hospital, led the research effort. Their findings were published in the March issue of the *Journal of the National Cancer Institute*.

Over a 25-month period, the researchers compared 950 people with cancer, 198 with other diseases and 87 healthy volunteers. They found elevated levels of FGF in the urine of some patients with cancers of the kidney, prostate, brain, testis, breast, colon, lung, stomach, intestines, ovaries and bladder, as well as those with leukemia and lymphoma.

When surgeons succeeded in completely removing tumors from some of these people, their FGF levels dropped to normal in as little as one month. By contrast, the amounts of protein were persistently high in those whose malignancies got worse or who died. Those without cancer had normal levels of the protein. "These findings suggest that FGF levels might be used to measure tumor activity, determine the effectiveness of treatments, and predict a person's chance of survival," said Nguyen.

Mai Nguyen

During the past 30 years, seminal studies by Folkman and HMS colleagues have focused on the relationship of cancer to angiogenesis, or the growth of small blood vessels, which act as the tumor's lifeline. They have discovered that many tumors emit FGF to induce angiogenesis. Other Harvard scientists have implicated two other proteins in angiogenesis—angiogenin and vascular permeability factor. "These three proteins keep coming up in studies of many different types of cancer," said Folkman.

Researchers at Children's Hospital are now working to develop drugs to block FGF production and tumor growth. Efforts also are under way to determine the precise source of FGF and the biological "switch" that stimulates its production. Such findings may provide important clues to the origin of other proteins involved in angiogenesis.

"We are looking into the feasibility of obtaining profiles of angiogenesis factors on all cancer patients. This would give us a pattern of their disease to specifically tailor treatment for each patient and to monitor results," said Folkman. "Physicians would know what to do and when to do it for the best outcome."

A New Player in Vaccines

By disabling a virus just enough to keep it from multiplying, HMS researchers have developed a type of vaccine that may prove valuable in the fight against a wide range of viral infections.

The vaccine was developed in the laboratory of David Knipe, HMS professor of microbiology and molecular genetics. He describes the mutant virus as "half alive" because its activity lies somewhere between the two classic types of viral vaccines: live or dead. In animal studies concluded by postdoctoral fellow Lynda Morrison and reported in the February issue of the *Journal of Virology*, this mutant proved to be highly effective against herpes simplex virus type 1 (HSV-1), the strain that causes cold sores and eye infections.

Approximately 90 percent of Americans are infected with HSV-1. The virus initially infects epithelial cells and then spreads to sensory neurons, where it expresses many of its genes and lies dormant. However, reactivation of the virus leads to recurrent disease and the possibility of spreading to the central nervous system, causing encephalitis. A vaccine such as the one developed by the Knipe team may provide a way to prevent such latent infection as well as block the initial infection.

The virus used in the vaccine is "alive" in the sense that once it infects a cell, it stirs an immune response by both B cells and T cells. But it lacks an essential gene for replication, rendering it "dead" in its ability to multiply and advance the infection.

By contrast, a dead virus, composed only of protein subunits, can only stimulate a B-cell antibody response. Vaccines that use live, although weakened viruses, can provoke a more vigorous, complete response (both B cell

photo by Barbara Steiner

David Knipe

William Landis and Louis Gerstenfeld

photo by Barbara Steiner

and T cells are primed to recognize the invader), but these active viruses carry the risk of introducing the infection.

Knipe's team showed that for herpes protection, the mutant virus elicited an immune response almost as good as the active type of virus. He hopes that such mutant viruses, which can't replicate and thus must be "grown" in cells isolated through genetic engineering, may lead to the development of similar vaccines for a wide variety of viruses, including HIV and respiratory syncytial virus, a common childhood ailment.

With collaborators at Dana-Farber Cancer Institute, Knipe also hopes to use the mutant herpes as a vector to express foreign proteins from other viruses. For example, a mutant herpes possibly could be engineered to express key HIV proteins, thus priming the body's immune system to recognize and attack HIV upon exposure.

Majid Fotuhi '95 and Amy E. Adams '96 were both poster presenters at the 54th Soma Weiss Day, April 21. Sixty-one students presented posters on their research; and four delivered oral presentations. Peter Howley '72, George Fabyan Professor of Comparative Pathology and chair of the HMS Department of Pathology, delivered the keynote address, entitled "Choices in Biomedical Research."

photo by Barbara Steiner

Bones in Space

When the space shuttle hurled into orbit April 9, it carried with it millions of chicken bone cells. The cells are part of an experiment designed by two HMS associate professors of orthopedic surgery, William Landis and Louis Gerstenfeld, to study bone growth in a zero-gravity environment. Researchers expect that the resulting data will help answer some critical questions about how human bones grow and heal. Chicken bones were used in the experiment because they grow in much the same way as human bones.

This experiment, which is funded jointly by NASA and the National Institutes of Health, was one of three on the nine-day flight designed to study why the absence of gravity leads to bone and muscle loss. People lose bone and muscle mass both in a weightless environment and when illness or injury forces them to remain physically inactive for months at a time. Soviet cosmonauts who have spent many months in space have become so weakened that they could not walk upon returning to earth.

By providing clues as to what goes wrong in the absence of gravity, the space shuttle experiments may also point the way to therapies for promoting healthy bone growth here on earth. "Bone and muscle cells respond to the force of gravity," Landis says. "But how this works on a molecular level is an unknown."

Prior to the flight, Landis and Gerstenfeld prepared two sets of chicken cells, each at a different stage in development—thus enabling them to study whether the lack of gravity affects a particular stage of bone

Jeffrey Drazen and Elliot Israel.

photo by Barbara Steiner

growth. The researchers are interested in determining if the loss of gravity in any way interferes with the process of bone construction, and if so, at what point.

Says Gerstenfeld: "This type of sophisticated experiment on the space shuttle has been a long time coming."

New Relief for Asthma

Mild asthma sufferers can breathe easier with the emergence of a new treatment being tested by a research team at Beth Israel Hospital.

In a study led by pulmonologists Elliot Israel, assistant professor of medicine, and Jeffrey Drazen '72, HMS Parker B. Francis Professor of Medicine, 139 asthmatics were treated with a drug compound known as zileuton. Not only does zileuton restore lung function immediately upon use, but study results also show that it actually may improve airway function over time, thus leading to a decrease of asthmatic symptoms. If further clinical trials prove zileuton's effectiveness, it will be the first asthma drug treatment developed in 20 years. Drazen and Israel's study, which is being funded by Abbot Laboratories, the pharmaceutical company developing the drug, was published in the December 1993 issue of *Annals of Internal Medicine*.

The most common asthma treatment are beta-agonist inhalers, which when inhaled, cause the smooth muscles of the airways to relax, allowing normal breathing. But, says Israel, these do nothing to confront the true antagonists for asthma sufferers: the nasty irritants that inflame airways, causing them to constrict in the first place. It's here where zileuton goes to work by blocking the formation of compounds called leukotrienes, which are produced by the inhalation of cold air or allergic agents. If the leukotrienes are inhibited, the airway stays clear.

Israel predicts that zileuton will be used primarily by mild asthmatics, those who need an inhalant once or twice a day, but probably not by those who require oral steroid treatment.

Daniel Federman '53, dean of medical education, hugs Barbara Ebert at a reception honoring his being named Physician of the Year by the American College of Physicians. "Being a physician is the primary thing I was meant to do," he said.

photo by Barbara Steiner

photo by Barbara Steiner

Diana Rodriguez's family surrounds her as she opens her match to Brigham and Women's Hospital.

A Striking Match Day

The biggest graduating class in the history of HMS had a highly successful match day, sending its 192 members to top residency training programs in every specialty. The large size of the Class of 1994 is the result of a recent trend towards students taking extra years to enrich their experience with research, international programs and the attainment of joint degrees. This year over 30 percent of the graduating class matched in internal medicine, a threshhold not crossed since 1988, with many of them going to identified primary care programs. In addition, five students matched in family practice residencies, more than in any years since 1986.

"With so many excellent students competing for the best residency opportunities in the country, there was even more anticipation of the results than usual this year," said Edward M. Hundert '84, Associate dean for student affairs, "so it was particularly gratifying to see results as outstanding as we have ever had."

ANESTHESIA

Daniel Burkhardt
University of California, San Francisco

Robert Gipe
University of Washington Affiliates, Washington

Thomas Suarez
Massachusetts General Hospital

Carlos Trejo
Brigham and Women's, Boston

John Wilson
Stanford University Hospital, California

EMERGENCY MEDICINE

Janice Blanchard
George Washington University, Washington, D.C.

Lance Brown
LAC-University of Southern California Medical Center

Kimberly Collins
University of New Mexico

FAMILY PRACTICE

Connie Casillas
Greater Lawrence Family Health, Massachusetts

Caroline Richardson
St. Margaret Memorial, Pennsylvania

Naomi Wortis
University of California, San Francisco

MEDICINE

Paul Allen
Cambridge Hospital, Massachusetts

David Altshuler
Massachusetts General Hospital

Wendy Armstrong
University of Michigan Hospital, Ann Arbor

Rebecca Baron
Brigham and Women's, Boston

Heidi Behforouz
Brigham and Women's, Boston

Jesus Berdeja
University of California, San Francisco

Hannah Betensky
Strong Memorial Hospital, Rochester, New York

John Brooks
Brigham and Women's, Boston

Alphonso Brown
Brigham and Women's, Boston

Dean Daniel Tosteson '49, right, talks with George Thorn, Hersey Professor of Theory and Practice of Physic Emeritus, at the first Ezekiel Hersey Council luncheon in May. The council was created to honor alumni and friends of HMS who have remembered the school in their estate plans or made a lifetime planned gift. Guest speaker Huntington Potter, associate professor of neurobiology, spoke on "Recent Advances in Alzheimer's Disease Research."

photo by Barbara Steiner

Pulse

Harold Burstein
Massachusetts General Hospital
Duyen Dang
University of Minnesota, Minneapolis

Juan DeZengotita
Portsmouth Naval Hospital

Jessica Cohen Dudley
Brigham and Women's, Boston

Mark Dumais
Duke University Medical Center,
North Carolina

Carey Farquhar
University of Washington Affiliated

Paul Foster
University of Washington Affiliated

Angela Fowler
Massachusetts General Hospital

Jonathan Friedberg
Massachusetts General Hospital

Timothy Friel
Massachusetts General Hospital

Tejal Gandhi
Duke University Medical Center,
North Carolina

Reza Gandjei
University of California, San Francisco

Jeffrey Greenwald
Barnes Hospital, St. Louis

William Hahn
Massachusetts General Hospital

Mahalakshmi Halasyamani
Brigham and Women's, Boston

Rebecca Hung
Brigham and Women's, Boston

Nathaniel Hupert
University Health Center, Pittsburgh

Malcolm John
Massachusetts General Hospital

Eugene Kaji
Beth Israel Hospital, Boston

Rainu Kaushal
Brigham and Women's, Boston

Havon Knight
Emory University, Georgia

Richard Krasuski
Brigham and Women's, Boston

Ben Leder
Massachusetts General Hospital

Byron Lee
Stanford University Hospital, California

Paulette Lewis
New York University Medical Center

Otto Lin
Stanford University Hospital, California

Matthew Lonergan
University of Washington Affiliated

Rajesh Mangrulkar
University of Michigan Hospitals,
Ann Arbor

Sonal Mankodi
Brigham and
Women's,
Boston

Terence McGovern
New England
Deaconess, Boston

Benjamin Medoff
Massachusetts General
Hospital

Laura Melendres
Massachusetts General
Hospital

Richard Miller
Beth Israel Hospital, Boston

Gina Moreno
Massachusetts General Hospital

David Morrow
Brigham and Women's, Boston

Elizabeth Murphy
University of California, San Francisco

Anju Nohria
Yale-New Haven Hospital

James Oliver
Walter Reed Army Hospital

Elizabeth Onyemelukwe
Massachusetts General Hospital

Lauren Orloff
Massachusetts General Hospital

Kevin Park
Massachusetts General Hospital

Jayaraj Rajagopal
Massachusetts General Hospital

Lee Rawitscher
University of California, San Francisco

Christopher Roy
Brigham and Women's, Boston

Kristen Schaefer
University of California, San Francisco

Ann Sidell
University of Minnesota Hospital

Lauren Solanko
Brigham and Women's, Boston

Jordan Tishler
Brigham and Women's, Boston

Caroline Tsen
Massachusetts General Hospital

Craig Vinch
Beth Israel Hospital, Boston

NEUROLOGY

Alice Flaherty
Massachusetts General Hospital

Sonja Potrebic
Kaiser Permanente, Santa Clara, CA

NEUROSURGERY

Sepideh Amin-Hanjani
Massachusetts General Hospital

Nicholas Boulis
University of Michigan Hospitals\Ann
Arbor

Richard Chung
Massachusetts General Hospital

Long Dang
University of Minnesota

photo by Barbara Steiner

Nicholas Boulis is on his way to Ann Arbor for a residency in neurosurgery.

Stuart Kaplan
Washington University, St. Louis

Jeffrey Lee
Stanford University Hospital, California

Steven Leon
Brigham and Women's, Boston

Adel Malek
Brigham and Women's, Boston

Elizabeth Mutisya
University of California, San Francisco

OB/GYN

Christopher Bencomo
UCLA Medical Center

Katherine Chen
Brigham and Women's, Boston

Alisa Goldberg
Brigham and Women's, Boston

Lisa Harris
University of California, San Francisco

Katherine Jahnige
McGaw Medical Center
Northwestern University

Cindy Levine
Beth Israel Hospital, Boston

Karen Loeb-Lifford
Brigham and Women's, Boston

Nowal Nour
Yale-New Haven Hospital

Diana Rodriguez
Brigham and Women's, Boston

Sara Szal
University of California, San Francisco

OPHTHALMOLOGY

John Chu
University of Southern California,
Los Angeles

Stephanie Harper
Massachusetts Eye and Ear Infirmary

Christopher Kelly
Wills Eye Hospital, Pennsylvania

Ferzaad Moosa
University of Southern California

Terri Pickering
University of California, San Francisco

Melanie Ryan
Massachusetts Eye and Ear Infirmary

Mary Wu
Massachusetts Eye and Ear Infirmary

ORAL SURGERY

Alan Chun
Massachusetts General Hospital

Katherine Keeley
Massachusetts General Hospital

Randy Todd
Massachusetts General Hospital

ORTHOPEDIC SURGERY

Eric Benz
Strong Memorial Hospital, New York

Craig Boatright
University of Washington Affiliated

Bruce Campbell
Rush-Presbyterian, St. Luke's, Illinois

Thomas Chi
University of Washington Affiliated

Jeffrey Guy
Harvard Combined Orthopedic PG

Andrew Hecht
Harvard Combined Orthopedic PG

Jon Hyman
Emory University, Georgia

Paul Kim
Yale-New Haven Hospital

Saechin Kim
Harvard Combined Orthopedic PG

Young-Jo Kim
Harvard Combined Orthopedic PG

David Rogers
UCLA Medical Center

Robert Satcher
University of California, San Francisco

OTOLARYNGOLOGY

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University of Pittsburgh

Serge Jean
Johns Hopkins Hospital, Baltimore

Vanessa Smith
Cleveland Clinic, Cleveland

Richard Wong
Massachusetts Eye and Ear Infirmary

PATHOLOGY

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PEDIATRICS

Kelly Abraham
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Sarah Alexander
Children's Hospital, Boston

Manuel Arevalo
Children's Hospital, Los Angeles

Jennifer Botti
Baystate Medical Center, Massachusetts

Matthew Davis
Children's Hospital, Boston

Michael Fisher
Childrens Hospital, Boston

Meredith Golomb
Children's Hospital, Los Angeles

Roya Kohani
University of California, San Francisco

Bat-Sheva Levine
Children's Hospital, Boston

Bradley Marino
Johns Hopkins Hospital, Baltimore

Jose Morales
University of California, San Francisco

Samuel Moskowitz
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Children's Hospital, Boston

Sandy Urioste
Children's Hospital, Boston

David Weinstein
Children's Hospital, Boston

Lori Wiviott-Tishler
Brigham and Women's, Boston

PLASTIC SURGERY

Douglas Chin
New York University Medical Center

David Morales
University of Texas SW, Texas

Jeffrey Orringer
University of Michigan Hospitals,
Ann Arbor

PRELIMINARY MEDICINE

Edward Chan
Beth Israel Hospital, Boston

Richard Chin
Barnes Hospital, St. Louis

Vincent Li
Massachusetts General Hospital

Elizabeth Miller
Massachusetts General Hospital

Chi Nguyen Rosenberg
Massachusetts General Hospital

Lori Steinberg
Yale-New Haven Hospital

Renee Strucke
Duke University Medical Center,
North Carolina

PRELIMINARY SURGERY

James Coleman
Beth Israel Hospital, Boston

Betty Lee
University of California, San Francisco

John Maa
University of California, San Francisco

Sina Saidi
Emory University, Georgia

Ross Wakai
New England Deaconess, Boston

Pulse

PSYCHIATRY

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Harbor-UCLA Medical Center

Thomas Kerrihard
Cambridge Hospital, Massachusetts

Scott Kim
Massachusetts General Hospital

Michael Murphy
McLean Hospital, Massachusetts

William Pirl
Massachusetts General Hospital

RADIATION ONCOLOGY

Eric Chang
Joint Center for Radiation Therapy, Boston

Kenneth Hu
Memorial Sloan-Kettering, New York

Andrea Ng
Joint Center for Radiation Therapy, Boston

Joe Song
University of California, San Francisco

RADIOLOGY

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Strong Memorial Hospital, Rochester, New York

Bamidele Kammen
Hospital University of Pennsylvania

Ernest Kinchen
Duke University Medical Center, North Carolina

Bruce Lee
Massachusetts General Hospital

Alan McDaniel
Barnes Hospital, St. Louis

Edward Neymark
University of California, San Francisco

Sean Pierce
Barnes Hospital, St. Louis

Steven Stufflebeam
University of California, San Francisco

REHABILITATION MEDICINE

Laura Lee
University of Virginia, Charlottesville

Jutta Worwag
Mayo Graduate School of Medicine, Minnesota

SURGERY

William Austen
Brigham and Women's, Boston

Amber Barnato
University of Colorado, Denver

Lisa Clark
Duke University Medical Center, North Carolina

Rushika Fernandopulle
Hospital University of Pennsylvania

Jason Gee
New England Deaconess, Boston

Evelyn Gonzales
New York Hospital

Theresa Hadlock,
University of Chicago Hospitals

Seth Karp
Brigham and Women's, Boston

Gustavo Lara
University of Texas SW

Kingsway Liu
New England Deaconess, Boston

Melinda Maggard
UCLA Medical Center

Matthew Menard
Massachusetts General Hospital

Mitra Mofid
Brigham and Women's, Boston

James Morris
Massachusetts General Hospital

Gabriel Munoz
LAC-USC Medical Center

Wendell Ocasio
New York University Medical Center

Curtis Page
Emory University, Georgia

Lynette Wroblewski
University of California, San Francisco

Henry Zhu
Hospital University of Pennsylvania

TRANSITIONAL

Joseph Baraga
Hennepin County Medical Center, Minneapolis

UROLOGY

Peter Clark
Cleveland Clinic, Cleveland

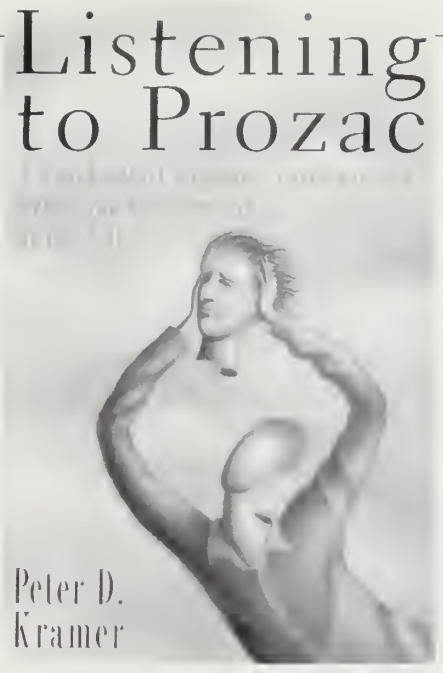
Paul Nguyen
University of Arizona

Andrew Pienkny
Cleveland Clinic, Cleveland

Jeffrey Guy and Novellyn Hitchens hug before heading off in opposite directions: Guy is staying in Boston, and Hitchens is going to Los Angeles.

photo by Barbara Steiner

Book Mark



LISTENING TO PROZAC
by Peter D. Kramer
(Viking, 1993)

by William I. Bennett

Wearing one glove like singer Michael Jackson, Peter Kramer '76 gazes out of a photograph in the February 7 *Newsweek*. His covered hand cradles a human brain; the other supports a stack of Prozac samples. It's the kind of photograph you get talked into posing for if you've aimed a book at the public eye. A dozen years ago, having collaborated on such a book, my co-author and I agreed to pose for *People* magazine. The pictures were truly stupid, but because our book wasn't all that popular they weren't published. Consequently, I'll go to my grave a little poorer but with one less regret.

Like Kramer's book, ours was about the remaking of the self, in that it was about weight control. But its message was, on the whole, perceived as discouraging: that this aspect of the self proves phenomenally difficult to alter, at least in desirable ways. *Listening to Prozac*, in which the "psychiatrist explores antidepressant drugs and the remaking of the self" has been read optimistically—so much so that Prozac has acquired street value. Indeed, the policy at a hospital I recently visited is to prescribe one of the congeners ("Prozac wannabes," Kramer calls them) to known drug abusers who are also depressed, rather than run the risk that the antidepressant with the greatest name recognition will enter the black market and not its intended recipient.

Would Kramer's book have been such a hit if he had called it *Listening to Fluoxetine*? The generic title is rather more euphonious to my ear, but even by the time the book came out, Prozac was no longer a drug "but a whole climate of opinion," as Auden wrote of Freud. Fifty years after the author of "Mourning and Melancholia" died, Prozac was labeled a "mood brightener" and was taking its place among the brighteners of hair, fabric and furniture in the attention of the media. The brand name, like Miss Clairol, is by now inescapable.

And the phenomenon is well worth exploring. The three specific serotonin-reuptake inhibitors, or SSRIs, currently available in the United States—fluoxetine, sertraline and paroxetine—are remarkable drugs. On a rare sunny afternoon last winter, I paused on a street corner near Harvard Medical School to chat with an experienced psychoanalyst who is also an expert psychopharmacologist. The sunlight led us (perversely) to talk of antidepressants and she said, "I sometimes think the brain has receptors for Prozac itself—and I mean Prozac, not serotonin. I just started a patient on that medicine and she has become a different person."

It happens. Not all the time, not even very often. And not usually that dramatically. But some people who take Prozac can tell you that they not only feel better about themselves, they experience the world in subtly different ways. In *Listening to Prozac* Peter Kramer tries to capture the elusive difference. He proposes that Prozac may be capable of altering a feature of personality that has been called "rejection sensitivity." In somewhat different terms, the psychologist Jerome Kagan has suggested that a "certain indifference to the humiliation of defeat" is a precondition of creativity and effectiveness in life. The vulnerability that movers and shakers lack sometimes responds to medication, Kramer argues—quite persuasively, I think.

The phenomenon is remarkable when it occurs. But missing from public awareness, and from *Listening to Prozac*, is an adequate acknowledgement of how often the drug doesn't work, even in people whose selves would seem designed for a Prozac remake. In my own rather limited experience, I have seen fluoxetine work well as an antidepressant but leave a patient about as fearful of rejection and avoidant as ever. I have seen another whom I would have expected to get excellent results respond only with side effects: somnolence and mild sexual dysfunction. I have seen a once-successful executive experience a return of pleasure and hope for a few days so as to function moderately well in a limited job for a few weeks, only to lapse slowly back into emptiness and obsession with his losses.

The first of these patients took advantage of the antidepressant benefits of fluoxetine to work steadily in psychotherapy, swimming against the current of fear and sadness. The second had to struggle with his sense of loss and defeat, because the world's best known antidepressant didn't help him. The third barely managed from day to day to contain the void, and he finally stopped taking the medication so as to return to alcohol, from which he found more comfort.

Kramer could hold, I think cor-

rectly, that such examples, while abundant, are irrelevant to his thesis. Before fluoxetine, the therapeutic drugs used in psychiatry seemed only to alter, in the most global way, states that were perceived as being pathological without ambiguity: psychosis, depression, uncontrolled mood swings, overwhelming anxiety. Yet fluoxetine in at least some people apparently makes it possible to alter traits of character that have long been taken for granted as a feature of the human condition, at least of some humans' condition.

Kramer's attention in *Listening to Prozac* is focused on what happens when that which has been regarded as a given seems to become a matter of choice, when so-called artifice is given license to replace the so-called natural. It is, as he acknowledges, only a new species in an old genus of medical doubts—about the use of anesthesia to relieve the "normal" pain of childbirth, for example, or the use of surgery to reduce the embarrassment of a "normal" nose.

This book is well reasoned and well documented. It reflects a wide and discriminating knowledge of the psychiatric literature as well as a good deal of clinical experience. I found it helpful and at times humbling in its command of a field in which I am a novice. I suspect I will return to it to take advantage of several intelligent reviews of certain topics in psychiatry. But there is a philosophical leitmotif underlying the rest that did not much interest me, largely because it seemed to hinge on the question of what is or is not "natural" about human beings and what it means to depart from that state of nature. Because I see the premise as empty—that there is some meaningful way to talk about "human nature" as divorced from the material culture, including drugs, in which it is embedded—I found it easy to slip off that hook.

Perhaps an even greater problem with the book is its duplicity: it is both *Listening to Prozac* and *Listening to Fluoxetine*. The first book is the one that has made headlines and will probably help to make a real study of the effects of fluoxetine on personality much harder for at least a generation. It hinges, among other things, on case reports that are impossible, for obvious reasons, to verify and that serve as classic anecdotal endorsements of a medication. Because of them (but not only because of them), there is now a kind of mild mass hysteria about fluoxetine which has, I suspect, enhanced its placebo effect such that many people taking it will, indeed, undergo changes of personality (and more power to them). The second book is the one I more admire. It is typical of Kramer's writing: thoughtful, humane, learned, readable. Whether he could have produced the second book without the first I do not know. What he has written is certainly worth having.

William I. Bennett '69 is the coauthor with Joel Gurin of The Dieter's Dilemma: Eating Less and Weighing More *(Basic Books, 1982). In 1991, after eight years as editor of the* Harvard Health Letter, *he began a residency in psychiatry at Massachusetts Mental Health Center. In July he joins the staff at Cambridge Hospital. He is also a member of the* Bulletin *editorial board.*

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UNDERWOOD

Scientist, Philosopher, Essayist, Poet:

The Prismatic Life of Lewis Thomas

by Lester Grant

"I think it will be found that the grand style arises in poetry, when a noble nature, poetically gifted, treats with simplicity or with severity a serious subject."
Matthew Arnold,
"On Translating Homer"

LEWIS THOMAS '37, BELLETRIST extraordinaire, died in New York Hospital on December 3, 1993 at the age of 80. He succumbed, after a lingering illness diagnosed in 1988, to Waldenström's macroglobulinemia, a malignancy of lymphoplasmacytoid cells.

Thomas is a distinguished name in the pantheon of great physician-writers that includes Francois Rabelais, Anton Chekhov, Tobias Smollett, Oliver Wendell Holmes, A. J. Cronin, Jules Romaine, Somerset Maugham, A. Conan Doyle and William Carlos Williams.

Thomas also was known to his colleagues as a medical scientist, whose interests ranged from viruses to the streptococci, from the breakdown products of papain to the Schwartzman reaction, from the mechanism of action of endotoxins to the effects of steroids on host responses to inflammation. But to the general public, he was celebrated as an essayist and the author of *The Lives of a Cell, The Medusa and the Snail, The Youngest Science, Late Night Thoughts on Listening to Mahler's Ninth Symphony, The Fragile Species, Et Cetera, Et Cetera* and, to a lesser extent, *Could I Ask You Something?*—a book of poems printed as a limited edition. His books have sold into the millions of copies. He generated a bibliography of 244 scientific papers—many of them concerned with the host response to infection, all of them on the cutting edge of biomedical research. Many of his essays first saw their way into print in the *New England Journal of Medicine*, including those collected in *The Lives of a Cell*. (*NEJM* still holds the copyrights.) He was the recipient of 29 honorary degrees and 33 special awards, ranging from book, literature, communication and public service awards, to those for achievements in medical science.

H. Sherwood Lawrence, a former New York University colleague, agreed that Thomas was a "one-man multi-disciplinary team"; he was widely respected as a physician, medical scientist, academician, educator, philosopher, essayist and poet, and as an ardent spokesman for the nurturing and support of biomedical science. A century of biology from Darwin to DNA was grist for Thomas's mill as he gave birth, fully formed from his head, to a luminous series of commentaries dealing with the mysteries of life and language.

His was the grace that launched 1,000 research grants to investigators inspired by his work in infectious diseases, inflammatory mechanisms and immunologic surveillance. Early on, he became aware that out on the extravascular bed the B cells were talking to the T cells and both of them were talking to the macrophage in an animated conversation that could not be transmitted clearly by even the most sophisticated information superhighway. One day, it was predicted, the hop-scotching of molecular fragments, the fitting of keys to locks, cell to cell, would reveal a role for the macrophage and its confederates that would create a manageable approach to neoplasia.

In a remarkable interview with Roger Rosenblatt in the *New York Times*, November 21, 1993, 12 days before his death, Thomas discussed death and dying as a patient undergoing the process.

"There's really no such thing as the agony of dying. I'm quite sure that pain is shut off at the moment of death....Something happens when the body knows it is about to go. Peptide

"We will not be wiped off the face of the earth by hard times, no matter how hard. We are tough and resilient animals, good at hard times. If we are to be done in, we will do it ourselves by thermonuclear weaponry, and it will happen because the military planners, and the governments who pay close attention to them, are guessing at the wrong worst-case. The term "nnacceptable" means that there is an acceptable degree of damage from thermonuclear bombs. This suggests that we are moving into an era when the limited use of this kind of weaponry is no longer on the worst-case lists."

Late Night Thoughts on Listening to Mahler's Ninth Symphony

hormones are released by cells in the hypothalamus and pituitary glands. Endorphins. They attach themselves to the cells responsible for feeling pain....On the whole...I believe in the kindness of nature at the time of death."

Dying, as he lay dying, was a subject Thomas was not at all reluctant to discuss. It was indeed the subject of his essay, "Dying as Failure," which appeared in 1980, in *Annals of Political and Social Science*, in which he makes the point that with changes over the previous 40 years in the way people die and in the ways they are cared for when ill, attitudes toward death have changed. When death seemed a metaphysical event, it commanded a kind of respect. Today, with the process of dying protracted, sometimes for years, it seems an evidence of failure.

"A dying patient is kind of a freak. It is the most unacceptable of all abnormalities, an offense against nature itself. [In earlier times] it was easier, indeed necessary, to accept the idea of an afterlife, and the power of religion was amplified by the high visibility of dying, especially by the deaths of so many young people....In a sense quite new to our culture, we have become ashamed of death, and we try to hide it, or hide ourselves away from it. It is, to our way of thinking, failure."

In his interview with Thomas, Rosenblatt asked if he wasn't certain that the end was absolute. Thomas responded: "For one thing, our individual coming to an end may have some connection with the continuity of the species. It may be as important for us to die as it is for plant life to die. So we die and live in our successors. I tell you, I wouldn't want to live forever, even if I could." When asked what it felt like to die, Thomas answered: "Weakness. This weakness. I am beginning to lose all respect for my body."

"Is there an art to dying?" Rosenblatt asked him.

"There is an art to living," he answered.

Ruminations about mortality were not, however, the driving force in Thomas's life. He was a celebrant, an optimist, a joyous person with an infectious enthusiasm that raised the spirits of all who knew him and worked with him. He viewed life as a coherent process, which spanned the unfolding of organic matter from a single cell into a highly organized and complex creation, borrowing survival mechanisms from an evolutionary process that reached its highest achievement with the development of language.

In *The Lives of a Cell*, he puts it this way: "To begin personally, on a confessional note, I was at one time, at my outset, a single cell. I have no memory of this stage of my life but I know it to be true because everyone says so.....I know that I began dividing. I have probably never worked so hard and with such skill and certainty. At a certain stage, very young, a matter of hours of youth, I sorted myself out and became a system of cells each labeled for what it was to become—brain cells, limbs, liver, the lot—all of them signaling each other, calculating their territories, laying me out....Thinking back, I count myself lucky that I was not in charge at the time. If it had been left to me to do the mapping of my cells I would have got it wrong, dropped something, forgotten where to assemble my neural crest, confused it....

"To face it squarely, I come from a line that can be traced back, with some accuracy, to a near infinity of years before my first humanoid ancestor turned up. I go back, and so do you, like it or not, to a single Ur-ancestor whose remains are on display in rocks dated approximately 3.7 thousand million years, born a billion or so years after the earth itself took shape and began cooling down. That first of the line, our n-granduncle, was unmistakably a bacterial cell."

Thomas was born in Flushing, Queens, on November 25, 1913, to Joseph Simon Thomas, a doctor, and

the former Grace Emma Peck, a nurse. In *The Youngest Science*, Thomas recounts his youth:

"All the children of Flushing were juvenile delinquents. We roamed the town in the evening, ringing doorbells and hiding, scrawling on the sidewalks with colored chalk, practicing for Halloween, when we turned into vandals outright, breaking windows, and throwing garbage cans into front yards. We shoplifted at Woolworth's, broke open the nickel-candy-machines...bought Piedmont cigarettes and smoked them sitting on the curb on Main Street at the age of 10. A bad lot.

"In the time of my childhood, nothing but the worst was expected of children. We were expected to be bad, there was no appealing to our better selves because it was assumed that we had no better selves. Therefore, to be contrary, as is the habit of children, we turned out rather well."

Early on young Lewis accompanied his father on house calls, an experience that influenced him deeply. He saw firsthand, and participated in, the revolutionary changes in medicine over half a century, from the days when the family doctor had a limited armamentarium of treatments to the era of molecular biology. Thomas attended grammar school and a year of high school in Flushing, then transferred to the McBurney School in Manhattan and entered Princeton at age 15. "I wasn't a prodigy of any kind but I was a bright kid and skipped some grades," he told Jeremy Bernstein in an interview in *The New Yorker* in 1978. "It seemed a good idea for me to get to college as soon as possible because I knew I had a long pull after that—going on to medical school."

In 1933 Thomas entered Harvard Medical School and graduated cum laude in 1937. After a two-year internship on the Harvard Medical Service at Boston City Hospital and a two-year residency at the Neurological Institute at Columbia Presbyterian Medical Center in New York, Thomas launched a career that carried him far and wide through the intermediate and upper echelons of academic medicine, including a hitch with the U.S. Naval Medical Research Unit No. 1 in Guam and Okinawa, 1944 to 1945.

His various career stops included a month-long stay in Halifax, Nova Scotia, to study an outbreak of meningitis; Johns Hopkins University, as an assistant professor of medicine; Tulane University School of Medicine as professor and director of the Division of Infectious Diseases; and then into highly visible professorships in pediatrics, medicine and pathology at the University of Minnesota, at New York University as professor and chairman of pathology and medicine and dean, and at Yale-New Haven Medical Center as professor and chairman of pathology, and later dean.

His peripatetic job transplants gave Thomas the profile of one who flitted through life, collecting careers. But with each successive assignment, he helped create a solid base of scholarship in a new setting.

One day in 1969 he came into my office at NYU to say he was leaving the dean's position, which he had held from 1966—an announcement that sent shock waves through the faculty. He said he was anxious to get back to the lab on as close to a full-time basis as possible. So he moved to Yale, as professor and chairman of pathology, where he left his mark again. Then after three years, he was in the dean's office at Yale until 1973.

On one visit with him in New Haven, I asked him how he could jump back from the frying pan into another hot fire and possibly lose his best shot at bench work, the job he liked most of all. "I just had to do it," he said. "They urged me to take it and I felt that I could be useful." After one year he resigned, in 1973, and returned to New York, this time as the CEO of Memorial Sloan-Kettering Cancer Center, a position he held until 1980. He served as president of the New York Academy of Sciences in

"The overwhelming astonishment, the queerest structure we know about so far in the whole universe, the greatest of all cosmological, scientific puzzles, confounding all our efforts to comprehend it, is the earth. We are only now beginning to appreciate how strange and splendid it is, how it catches the breath, the loveliest object afloat around the sun, enclosed in its own blue bubble of atmosphere, manufacturing and breathing its own oxygen, fixing its own nitrogen from the air into its soil, generating its own weather at the surface of its rain forests, constructing its own carapace from living parts, chalk cliffs, coral wreaths, old fossils from earlier forms of life now covered by layers of new life meshed around the globe. Troy upon Troy. Seen from the right distance, from the corner of the eye of an extraterrestrial visitor, it must surely seem a single creature, clinging to the round warm stone, turning in the sun."

Late Night Thoughts on Listening to Mahler's Ninth Symphony

"Perhaps the safest thing to do at the outset, if technology permits, is to send music. This language may be the best we have for explaining to others what we are like in space, with least ambiguity. I would vote for Bach, all of Bach streamed out into space over and over again. We would be bragging, of course, but it is surely excusable to put the best possible face on at the beginning of such an acquaintance. We can tell the harder truths later."

The Lives of a Cell

1989, and from 1988 to 1992 he was a scholar-in-residence at the Cornell University Medical College.

His views on being a dean were best expressed in an essay in *The Youngest Science*, entitled "The Governance of a University": "The worst of all jobs is that of a dean. He carries, on paper, the responsibility for the tranquillity, productivity, and prestige of all the chairmen of the departments within his bailiwick, and when things go wrong at the outskirts, in the laboratories of an individual faculty member or the cubicle of a graduate student, the blame is swiftly transported toward the center...and straight on to the dean. The actual power of a dean to do anything much is marginal at best and, even at that best, dangerous if he tried to use it."

The quick shifts from dean-to-chairman-to-dean were not his only inconsistencies. To the very end Thomas smoked cigarettes, a long-standing habit that he discouraged in other people but justified for himself on the grounds that it is all right in old age!

Thomas was a joy to work with. Supportive of his troops, he would discuss experimental protocols, raise questions, snap his fingers, offer suggestions and then indicate cheerfully that things were going well and, with attention to detail and alertness for unexpected experimental findings, grant renewals could be foreseen. He was self-deprecating and witty and had a physician's sense of human frailty, born of a gnawing concern for his own ignorance.

Once early in his deanship at NYU, he called the team together for a shakedown session and said: "I want you all to function as independently as possible, which means that you will make decisions sometimes on your own. I may not agree with your decisions, but I want you to know that you can make them. All I ask is that you make not more than one stupid mistake in any given week."

On another occasion he commented that he would never hire someone who was not at least as smart as he was, a criterion almost anyone would have been hard pressed to meet. At a time when I was involved in helping to set up interviewing criteria for admission to the medical school, he asked me to discuss the criteria in use. (He knew perfectly well what they were.) At the finish he asked me if I really knew what I was doing. Helplessly, I answered: "Probably not." He then said he had a suggestion to make. Any student who identified himself as a "pre-med" would be automatically excluded from admission. All students should take the standard scientific requirements, but the emphasis should be on literature and language, and classical Greek should be the cornerstone of college studies. Any student with straight As in classical Greek would be virtually an automatic admission.

Thomas was always there, or came on the run when he was needed, and he stood by his troops, whether to do so was popular or not. When a member of the faculty was charged with a felony, Thomas's first question was: "What can we do for him now?" He had a special smile, which opened the window shades and brought sunshine into the room. His voice was soothing and comforting, and he had a great offbeat sense of humor.

His boldness as an investigator dazzled his colleagues. One evening he had a good experimental idea and thus proceeded into the animal house, where he immunized 200 rabbits. There is the story of how he appeared at a colleague's door at 11:00 PM with snow on his hair and a rabbit with floppy ears in his arms to describe the interesting result of papain administration.

At a certain level, Thomas was a loner. He is remembered at the Atlantic City meetings in the old days walking by himself on the boardwalk. He was not "one of the boys." He accepted friendship at a certain level. Most of the people who worked with

him adored him, reached out to him and wanted him as an intimate friend. But one felt that this was not returned in quite the same way. There was a certain privateness about him, and one could sense when this was impenetrable.

Words, syntax, language—these were the intellectual passions of Lewis Thomas. He called me into his office one day to show me a book he had just purchased: a Chinese dictionary. I asked him if he planned to master the Mandarin language. He said he did not but he liked to have the book near him because there were so many interesting word derivations in it. High on his list of things he did not accomplish in life were the ability to play the piano and to master French with the sophistication of a native Parisian.

Sometimes he was ironic. On the dismaying prospects of cloning, he observed: "I have an alternative suggestion. Set cloning aside and don't try it. Instead, go in the other direction. Look for ways to get mutations more quickly, new variety, different songs. Fiddle around, if you must fiddle, but never with ways to keep things the same, no matter who, not even yourself. Heaven, somewhere ahead, has got to be a change."

Sometimes he was just plain delightful: "The things I like best in T.S. Eliot's poetry...are the semicolons. You cannot hear them, but they are there, laying out the connections between the images and the ideas. Sometimes you get a glimpse of a semicolon coming, a few lines farther on, and it is like climbing a steep path through woods and seeing a wooden bench just at a bend in the road ahead, a place where you can sit for a moment and catch your breath. Commas can't do this sort of thing; they can only tell you how the different parts of a complicated thought are to be fitted together, but you can't sit, not even take a breath, just because of a comma."

Sometimes he was a worry wart. Speaking of the legacy that his generation is leaving to the younger generation, Thomas reflected on the comments of a television pundit who, speaking of the importance of civilian defense, noted that it could make the difference of reducing 80 million deaths in 20 minutes down to 40 million, maybe even 20 million. "If I were sixteen or seventeen years old and had to listen to that," he said, "I would want to give up listening and reading. I would begin to think up new kinds of sounds, different from any music heard before, and I would be twisting and turning to rid myself of human language."

Sometimes he was inspired: "I have been trying to think of the earth as a kind of an organism, but it is no go. It is too big, too complex, with too many working parts lacking visible connections. The other night, driving through a hilly, wooded part of southern New England, I wondered about this. If not like an organism, what is it like, what is it most like? Then, satisfactorily for that moment, it came to me. It is most like a single cell."

Thomas was the recipient of many honors, but none moved him more than the award by the Rockefeller University, on May 18, 1993, of the first Lewis Thomas Prize, a tribute to the scientist as poet. His daughter Abby read selections from two of his books of essays—*The Medusa and the Snail* and *The Youngest Science*. Thomas responded in his typically graceful way: "Up to now, the award that most impressed me was to become a lovely building by Venturi at Princeton, designed for research in molecular biology, with my name over the front door just as if I had earned it and owned it, as far from the truth as you can get but the greatest of possible pleasures for me personally. That, I thought, was that, and quite enough, thank you.

"But then, just a while back I was told I was to be awarded this prize, and I was simply dumbfounded....I knew I would be obliged to say something in acceptance of this award. So I turned,

"Words like 'disaster' aud 'catastrophe' are too frivolous for the events that would inevitably follow a war with thermouuclear weapons. 'Damage' is uot the real term; the language has no word for it. Iudividuals might survive, but 'survival' is iu itself the wrong word."

Late Night Thoughts on Listening to Mahler's Ninth Symphony

as I always do on all such occasions, to my dearest friend of a lifetime and the loveliest of all companions, and asked her: 'What on earth should I say?'

"Her reply...was 'Keep it short.' "

Thomas is survived by Beryl, that dearest friend of a lifetime and his wife of 52 years; three daughters, Abigail Thomas and Judith Mira y Lopez of New York, and Eliza Thomas of Vermont; five grandchildren and two great-grandchildren.

Lester Grant '55 is a medical educator in Dallas, Texas.


Lewis Thomas
The Youngest Science Lewis Thomas

Out of Context

by Michael LaCombe

STARING AT THE CEILING, LISTENING to the dog snore, hearing the wind rattle the linden—this was not my idea of knitting the tattered sleeve of care. I slipped out of the covers into the chill of the room, stepping around my vigilant watchdog Kate's form in the darkness, avoiding lights, noise, anything that might dispel any hope of return to sleep. I crept down the front stairs, avoiding the one creak that might tell the spirits of the night I was awake. The night outside was as dark as the house—no stars, no moon assertive enough to argue with the heavy clouds. My breath fogged the window pane. I stepped back from its frost. Winter fought spring's advance still.

I saw him when I turned toward the kitchen. He sat with his back to me, at the breakfast nook reserved for sunrises and coffee. He hardly moved, wedged as he was between table and bench, elbows resting on the oak surface, shoulders hunched like a barn owl's at midnight. I stepped into the room for a better view. Seeing him was like trying to apprehend the mirage you know is there—mental image attempts a match with reality, while sun and glare, wind and shadow, hide the view. The gibbous moon attempted an appearance between banks of clouds. Its brief brightness momentarily hid my guest from me—this shade that came and went with the waning and waxing of light in the room.

"Can't sleep?" I felt him say (confirming my theory that apparitions never talk to you, they think to you.) I thought right back to him.

"Weary of considerations," I said.

"Robert Frost's 'Birches,' isn't it?"

Seeing him was like trying to apprehend the mirage you know is there—mental image attempts a match with reality, while sun and glare, wind and shadow, hide the view.

Well, well...a literate ghost. I circled him slowly, not wanting to frighten him off, not quite sure of the rules of etiquette in this arena. Does one stare? With a ghost, are initial pleasantries *de rigueur*? How much small talk must occur before the big questions? Where did you come from? What's it like There? Do you do this often? Just appear, I mean? How's Osler these days?

He wore his long white lab coat, open in the front, and the familiar heavy-framed horn-rimmed glasses. (Ghosts, I thought childishly, are supposed to wear sheets, not lab coats.) He seemed younger than his stated age, with that shock of cowlick falling forward from his full head of hair.

The wind outside agitated the euonymus, scratching the window with the shrub's branches. The moon had retreated once and for all, leaving the darkness to magnify the ticking of the kitchen clock and to silhouette my guest in inconstant bas relief. I seemed to know who he was without having to inquire. Whether he had thought his name to me or whether other, earlier images had come to mind, I cannot say. But here he was. In my kitchen. And I had manners enough not to ask him his name or where he had come from. (With ghosts, shades and apparitions, one always assumes the better of two outcomes.) In my excitement and confusion, still I hadn't the presence of mind to avoid a first, stupid question.

"What do you think about health care reform?" I asked, immediately regretting the thought, trying desperately to retrieve it before it could float across the room and cause him to laugh at me, to dissolve away into the night, to leave me there alone. I should have known, from all the stories of his kindness, that he would treat this question as he had all others in his time, with his particular gentleness and wisdom.

...health care has become the new name for medicine. Health care delivery is what doctors now do, along with hospitals and the other professionals who work with doctors, now known collectively as the health providers. The patients have become health consumers. Once you start on this line, there's no stopping. Just recently, to correct some of the various flaws, inequities, logistic defects, and near-bankruptcies in today's health-care delivery system, the government has officially invented new institutions called Health Maintenance Organizations, already known familiarly as HMO's, spreading out across the country like post offices, ready to distribute in neat

packages, as though from a huge, newly stocked inventory, health....the word is a fallible incantation. Several decades of mental health have not made schizophrenia go away....My complaint about the terms is that they sound too much like firm promises.

This was history, I thought. Old stuff. We're already there, like it or not. Then, I caught myself, embarrassed. If we are sitting here at the kitchen table, darting thoughts back and forth across the space between us, could he read my mind as well? I mean, when I didn't intend to think to him, did he still know my thoughts? Was there no safety in mental reservation? I resolved to...to think before I thought. But still I had a pressure, an urgency we have all felt, to be conversationally clever enough to keep his attention, to hold him there with me. This chance might never come again. Yet, he seemed to have all the time in the world.

"But prices are high. Health care costs are enormous. The GNP and all that. Controls on these costs seem obvious to virtually everyone," I said to him, trying mightily not to add the thought, "So who are you to say?"—or to even harbor it.

Offhand, I cannot think of any important human disease for which medicine possesses the outright capacity to prevent or cure where the cost of the technology is itself a major problem. The price is never as high as the cost of managing the same diseases during the earlier stages of no-technology...if a case of typhoid fever had to be managed today by the best methods of 1935, it would run to a staggering expense...if I were a policy-maker, interested in saving money for health care over the long haul, I would regard it as an act of high prudence to give high priority to a lot more basic research in biologic science. This is the only way to get the full mileage that biology owes to the science of medicine, even though it seems, as used to be said in the days when the phrase still had some meaning, like asking for the moon.

"I sense, as a professional of sorts, a new atmosphere of anti-science, more than a fear of science, an anxiety to replace science with magic."

The thoughts provoked by his words came like fireflies in the night. I no longer cared if he listened in. He talks—thinks—like he writes, I thought. I like him. I love this. I love him. I wish he would stay here for days, for weeks, forever. And this thought as well: I too had those thoughts regarding the central nature of biologic science—we all did—and firmly believed that corporate America was selling biomedical research quite short indeed. What had happened to us? Why were we now so quick to espouse the party line? Of course science was fundamental! Where are our brains? What has happened to our government? Seduced by alternative medicine? Addled with love, medicine, and miracles?

I sense, as a professional of sorts, a new atmosphere of anti-science, more than a fear of science, an anxiety to replace science with magic. I sense, as well, a general and sweeping anti-scientism, perhaps linked to anti-intellectualism as a new worldview, sweeping through the most educated and well-informed segments of the population. And, in my darker moments, I cannot think of anything to do about it except to wait in hope for it to pass away. Right now, however, we might as well recognize that anti-science is reaching the status of a philosophical position in the public mind, and we had better face up to it. I leave it there.

I didn't take this as rebuke. Nor had I any impulse to run and hide, to avoid this soup of philosophical repartee in which I was floundering so badly. I wanted more. I wanted to learn from him. I had had classmates like that, way back when, colleagues unafraid of asking the stupid question, who learned and leapt leagues ahead of me, while I busily hid my ignorance from my professors. Now, I was happy to be like them...finally. To have this chance. There were a million things to ask, a billion points to explore, a trillion lines of investigation, given, please remember, my guest's current circle of friends. (What were Grand Rounds like up There, anyway?) I had only to ask.

"How can we teach our students to think? We've not been doing very well in this regard, have we?" I asked. "What I mean is, given your...your new insights, how is it that we can be such sheep, believing what is fashionable, only what is politically correct, embracing only what is believed by those who are important, connected, presumably in power? I am asking, I suppose, what is the nature of thinking?"

It has been one of the great errors of our time to think that by thinking about thinking, and then talking about it, we could possibly straighten out and tidy up our minds....Once you acquire such a notion, you run the danger of moving in to take charge, guiding your thoughts, shepherding your mind from place to place, controlling it, making lists of regulations....

Forget whatever you feel like forgetting...practice not being open, discover new things not to talk about, learn reserve, hold the tongue...develop the human talent for forgetting words, phrases, whole unwelcome sentences, all experiences involving wincing. If we should ever lose the loss of memory, we might lose as well...the blush...the suddenness of laugh-

ter...the unaccountable sure sense of something gone wrong...the marvelous conviction that being human is the best thing to be.

Hold that thought! Follow it with days of lectures. How wonderful! How wonderful! Yet, I could see dawn far off, over the last ridge, an hour or less away, and something told me he would be leaving then.

I had time for one last question. There were my very real concerns about the art of medicine, about chalk-talk of etiologies and biochemistry at the expense of art, of teaching at the bedside. I worried along with the rest, given this health care reform business, about academic medicine and its teachers; what would become of them, those few great teachers remaining? And how did he think we were doing in general, given his new perspective? What were his thoughts concerning medicine's direction? Any advice from above? How were we tending the shop in his absence? And what about death itself? Having only just crossed the river himself, he'd know.

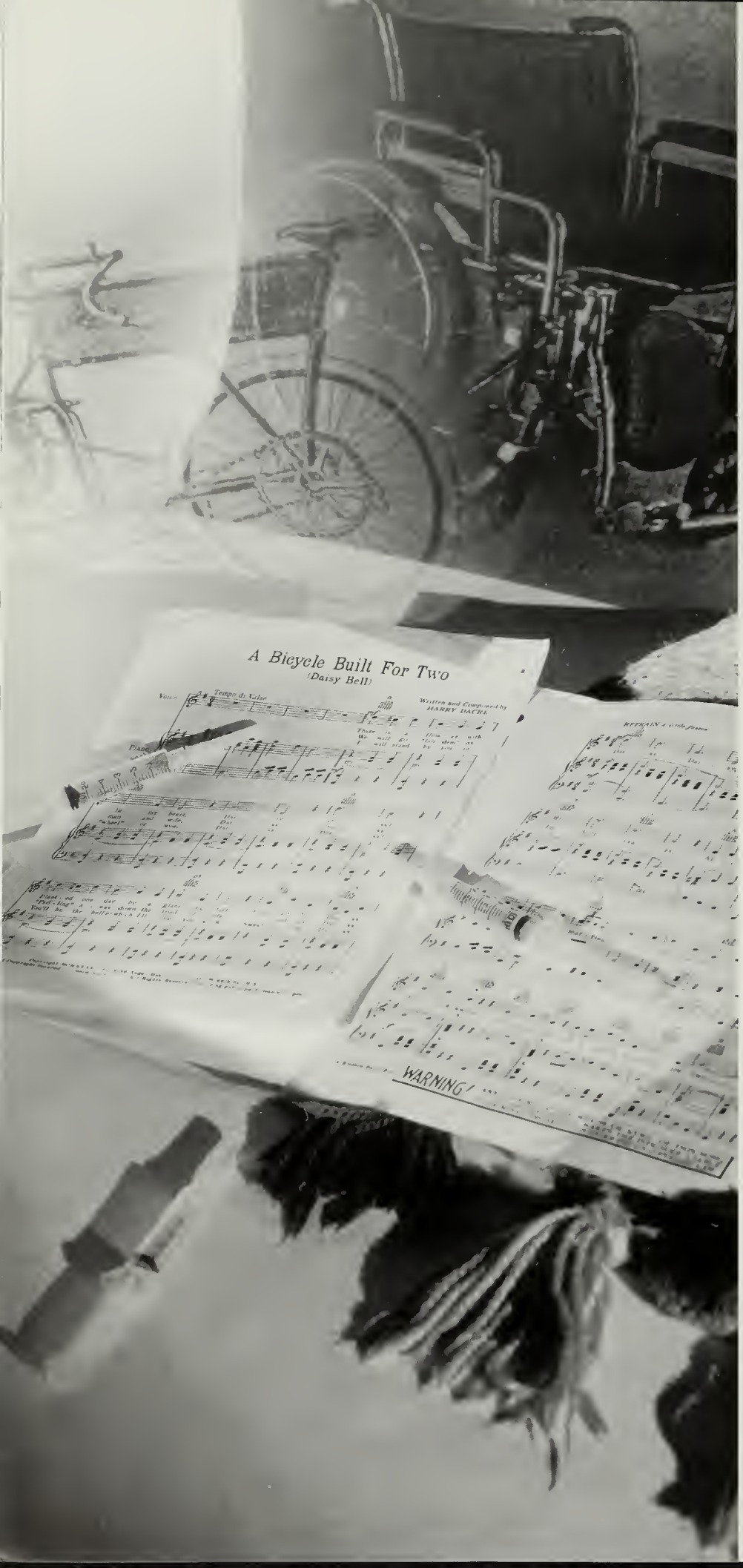
Were we close to solving the enigma of AIDS? Had he been given some inkling from...God about how our research was going? Could he guide us, nudge us in the proper direction? And there was cancer research, an endeavor close to his heart. There is so much we don't know, so far to go, and perhaps, given his new affiliations, my guest might provide some guidance here. But he preempted my last question with a soft chuckle:

It is the greatest fun to be bewildered, but only when there lies ahead the sure certainty of having things straightened out, and soon. It is like a marvelous game, provided you have some way of keeping score, and this is what seems to be lacking in our time....We would be better off if we had never invented the terms "science" and "humanities" and then set them up as if they represented two different kinds of intellectual enterprise...most things in the world are unsettling and bewildering, and it is a mistake to try to explain them away; they are there for marveling at and wondering at and we should be doing more of this....The thing to do...is to celebrate our ignorance...it should be a deeper satisfaction, even an exhilaration, to recognize that we have such a distance still to go....Get us through the next few years, I say. Just get us safely out of this century and into the next, and then watch what we can do.

Dawn now reached her rosy fingers over the ridge. At the far edge of pasture, the big doe dimpled the pond, sniffed, and was gone. Under a shelf of embankment, a rainbow lazily sipped crickets. Light began to fill the kitchen. I stared at the empty bench across the table; for the moment, all was right with the world.

Michael A. LaCoube '68 is a country doctor from Norway, Maine, and is associate editor of the American Journal of Medicine *and the* Annals of Internal Medicine.

Quotations from Lewis Thomas: The Lives of a Cell, The Medusa and the Snail, Late Night Thoughts on Listening to Mahler's Ninth Symphony, The Youngest Science *and* The Fragile Species.



Marion's Wish

by Elissa Ely

THERE'S A BLIZZARD OUTSIDE THE nursing home, but it means nothing to Marion. She sits by the window, facing away from the view. She's humming "Bicycle Built For Two." It's a hill of a song and she can't quite make the summit; every few stanzas she slides back to the beginning, then starts trudging up again. She's been trying to finish it for years.

Lately, Marion has been having chest pain. Her lungs have always been bad, and she has had seizures since childhood. She knows she takes medications but doesn't know which ones or what for. She knows she has lived in institutions most of her long life, but doesn't know why.

Marion has a brother who oversees her medical care from another state. He is a well-meaning, never-visiting man, who feels that medical aggression is a proof of love. He has told the nursing staff that when Marion suffers a cardiac or respiratory arrest, he wants a full code. To be more precise, he says (with admirable honesty) he could never forbid a resuscitation. He can't reconcile it with his best wishes for her.

By psychiatric standards, Marion is not competent to make her own medical decisions. Competency is determined by an exam, conducted several times, that measures memory, insight, judgment and depth of medical self-knowledge. Competency requires understanding the consequences of specific treatments, and knowing the

consequences of withholding these treatments. It means the patient must be able to convince the interviewer that she can juggle and pass judgment on the facts of her own life, and that she can grasp the concept of her own death. Marion can't finish "Bicycle Built for Two." She is nowhere near competent.

But her primary nurse wants a second opinion. The patient can't find her way to the day hall alone and she thinks the year is 1975. So what? She has strong opinions about how her life should end. Each time the nurse discusses it with her, she voices these same opinions, even though she doesn't remember having had the conversation (or having met the nurse) before.

We meet during the middle of the snowstorm. Marion is climbing her musical hill, stuck at this moment on "give me your answer dooo." Spinal damage has bisected her body into a 90-degree angle, and she sits in her chair facing the floor. Her hair is beauty-parlor blue. On her third finger she wears a faux rhinestone tea ring, held in a brass setting. The skin underneath is turning green.

"Marion," the nurse with me says. "This is the doctor and we want to ask you a few questions."

"Yup," says Marion.

"You remember we talked a few days ago about what would happen if you got very sick?"

Marion shakes her head. She is humming under her breath.

"That's OK. We'll start over. Marion, if you got very very sick, there are things we could do to help. But you might not want them, even if they kept you alive."

"Yup."

"If you got very sick, if your heart stopped working, or you stopped breathing, we might have to put a tube into your lungs."

"That would not be good," Marion says.

"Or needles in your arms."

"Not good."

She doesn't know the facts of the world, and doesn't remember that she doesn't remember. But she knows how she wants her life to end.

"Or keep you in bed hooked to a machine."

"No way."

"But if we didn't do these things, Marion, you might die."

Marion stops humming.

"Do you know what happens after someone dies?"

"Couldn't say."

"Me, neither," says the nurse.

"So why're you asking me?" Marion says.

The rest of the formal exam is easy. Marion does not know the date, the circumstances of her admission, the president, the best way to subtract 3 from 100, or the judicious response in a movie theater that has caught on fire. She cannot register and repeat three new objects (eyedropper, pen and coat hanger). She cannot hold a piece of paper in her right hand, fold it in three and place it on her left knee.

The nurse and I look at the standard Medical Interventions list: electrical resuscitation, intubation, transfusions, tube feedings, intravenous access through the neck. A patient is supposed to approve or disapprove each of these interventions in an informed manner. Marion could not begin to comprehend them.

Here's a patient who is demented and physically ill. She doesn't know the facts of the world, and doesn't remember that she doesn't remember. But she knows how she wants her life to end. A tube down the lungs or a machine riveting her to the bed would not be good. No way.

In the end, there's no need to discuss what needs to be done. We word our consultation in a way that we hope will allow Marion to call her own medical shots. We write in the chart that the patient is in the unusual position of being focally competent. We use her dementia as part of a paradoxical proof: though she does not recall what she has said in past interviews, she repeats exactly the same wishes with each subsequent questioning. She wants no heroic measures, no mechanically sustained life. The repetition of wishes, by a person with no memory, must be respected.

We hope this will work. It remains to be seen. One thing is clear, though. All the competency measures that stand in any court aren't worth a bicycle built for two to Marion.

Elissa Ely '87 is a psychiatrist at Cambridge Hospital and at Tewksbury State Hospital and is a commentator for National Public Radio *and a contributor to the op-ed page of the* Boston Globe.

Call Hour

by Paul Buttenwieser

In the small hours of a May night in 1965, I stopped by the emergency room of Jacobi Hospital and found a phone off the hook. I was a pediatric intern on a ward service, and there was no reason in the world, contractually or morally or even medically, why I should pick up a phone in the ER. No doubt one of my colleagues was involved in the intricate dance of patient referral, better known as dumping. I presumed that at the other end of the line, in another emergency room somewhere in the depths of the Bronx, his doppelgänger waited, poised to pounce upon a name to put on a transfer paper.

My suspicion was reinforced by the fact that the ER seemed totally abandoned; that is to say, no nurses or doctors were to be seen. There were plenty of patients, to be sure, no one in evident extremis, but no professional personnel whatsoever.

"Is somebody taking this call?" I asked of no one in particular, there being no one in particular to ask it of. Receiving no answer, I called out the names of the house officers I knew to be on call that evening. Again, no reply. Feeling that I had done all that could possibly be expected, I was about to leave the area when in impulsive violation of the most sacred rule of house officership, I picked up the receiver. "Can I help you?" was my fatal question.

"Thank God someone's there!" cried a woman's frantic voice.

I experienced a warm Hippocratic rush, mixed with a bit of shame and asked again, "Can I help you?"

"God, I hope so! If you can't, I don't know what I'm going to do!"

"What seems to be the matter?"

Heartened, apparently, by the physicianly sound of my voice, the woman calmed down considerably and told me her story: "I'm a nurse on private duty with an elderly patient. I'm seven months pregnant. This morning—yesterday morning, I guess—I had an infected tooth extracted. The extraction site was packed, but earlier this evening, after I came on duty with my patient, the pack came out. It was soaked with blood. I've tried to repack it as best I could, I've tried ice, I've tried everything I could think of, but I can't get the bleeding to stop. I calculate that I've been bleeding non-stop for the past 15 hours.

"A couple of hours ago I began having contractions. At first I thought they must be Braxton-Hicks, because it's so early, but they've been getting stronger and stronger, and I think I may be going into labor. I need to get to a hospital, but I can't leave my patient. I'm on 101st Street, near the park. I've phoned Mt. Sinai and Flower and Fifth to see if they could send a nurse over here, but they both refused. They said they'll take care of my patient if I bring him in, but he's not ambulatory. Even if I could move him, which I don't see how I could, I'd have to get his doctor's permission, and the doctor's service hasn't been able to reach him.

"There's no one home in the apartment across the hall. I've tried calling some friends who are nurses, but they're all working or out. My husband's out of the country. I don't know how much longer I can hold out. The contractions are getting stronger. I'm beginning to feel faint." Despite her best efforts, hysteria was beginning to seep back into her voice. "Please help me..."

What a mess! There I was, a pediatric intern, being asked to handle a hematologic-obstetrical crisis over the phone! And even if something could be done from a borough and a half away, there were any number of people who had a greater responsibility toward her than I did, including, for starters, the person, whoever he or she was, who had answered the phone in the first place. Nevertheless, the patient/doctor relationship, however tenuous, seemed to obtain and I felt obligated to do what I could to help her.

I told her I would call one of the hospitals near her and see if I could somehow talk them, or shame them, into sending someone over. She implored me not to hang up on her, so I kept her on one line and used another to phone Mt. Sinai. I was, of course, immediately put on hold, so I used a third phone to try and reach Flower and Fifth Avenue Hospital. I didn't worry too much about tying up all the Jacobi emergency lines—in any case, always a plus from a house officer's point of view—but I did have some difficulty manipulating the various receivers, and inevitably I began to get confused as to whom I was talking to or holding for.

I tried to keep the patient as calm as possible and at the same time impress upon the downtown ERs the urgency of the situation. I was getting nowhere with them, however, and meanwhile my patient was edging ever closer to several brinks.

Meanwhile, members of the ER team began to creep sheepishly, so it seemed to me, back toward the desk. Intrigued by the spectacle of a ward intern awash in phone equipment and notepads, they pestered me with questions, even as I was trying to talk on three lines at once as well as keep my patient (for so she had become) from going into labor or unconsciousness, or both.

Just as the situation began to look hopeless, she said she heard a noise outside the apartment. She left the phone and I heard some talking in the background. In a moment she returned with the blessed news that the next-door neighbors had returned. They were going to help her, but she had to get off the phone right away. She promised to let me know how things turned out, and we exchanged names. Hers was Samantha Toriani.*

The next day I phoned Mt. Sinai and Flower and Fifth to find out if a Samantha Toriani had come to one of their ERS, but neither of them had any record of her. Perhaps she had not gone into labor after all, I thought. I was curious as to what had happened, but pretty much resigned myself to yet one more patient lost to follow-up in the big city.

The next night I was in my apartment sleeping the off-duty sleep of the every-other-night-call intern—those heroic days!—when the phone rang. It was the Jacobi operator. She had a message for me from a woman named Samantha Toriani, who said she was a patient at Metropolitan General Hospital. She was very anxious to talk to me right away. The Jacobi operator had refused to give her my number (patching calls through wasn't even a gleam in AT&T's eye in 1965) but had taken the woman's number at Metropolitan General. She wanted me to call her as soon as possible. Groggy as I was, I dialed the number in the dark—House Officer Skill #137—and the phone was answered on the first ring.

"May I please speak with Samantha Toriani?"

"Dr. Buttenwieser?"

"You wanted me to call you now?"

"Oh, Dr. Buttenwieser, I'm so sorry to disturb you on your night off, but I'm leaving in a few hours and I didn't want to go without thanking you for all you did."

"Are you all right?"

"I'm great! So's my baby."

"You had the baby?"

"They got me here with about 15 minutes to spare. But everything turned out wonderful. They had to give me a transfusion, but the baby's perfect. Tiny, but just adorable. I can never thank you enough."

"Did you say something about leaving?"

"Yes, my husband flew in from Switzerland. He has to go back today, and he says he's not going without taking both of us with him. He had a big row with the staff here, but in the end they gave in, believe it or not, so in just a few hours we're leaving for Geneva. But I couldn't go without telling you what happened and thanking you for saving my life."

I said something modest, but of course it was very gratifying. It was also very late, so after a pleasantry or two we said goodbye.

"Who was that?" mumbled my wife after I hung up the phone. She was, by coincidence, six months pregnant at the time.

"Just a mother I delivered yesterday," I told her, which more than sufficed at that hour of the night.

The light of day revealed a few implausibilities that hadn't been apparent to me in my obtunded state. Aside from the unlikely discharge, even AMA, of a premature baby on the second hospital day, there was the fact that Metropolitan General was a public hospital, and I was pretty sure patients there didn't have private rooms, let alone private phones. With mounting uneasiness, I phoned the hospital. No, they did not have a patient named Samantha Toriani, inpatient or recently discharged. No, they had not admitted a patient with anything remotely like her story in the past 36 hours. No, patients could not receive personal phone calls, but if I needed information about a patient they would be glad to put me through to the nurses' station.

It's never entirely pleasant to feel one has been had, but I must admit that there was a certain sensation about being involved in a full-fledged medical hoax. Samantha Toriani was instantly famous throughout the hospital, and I only slightly less so. There was tremendous peer pressure to pursue the matter. I was all for it, but how? I had no way of contacting her. To no one's surprise, "Samantha Toriani"—of course, the name was now under high suspicion—was not listed in the telephone directory. She had always been the one to initiate the calls, except the one time I had called her back at Metropolitan General....Wait a minute! That wasn't Metropolitan General! That was her phone! Or at least a phone she had access to. But alas, I hadn't written down the number; and House Officer Skill #137, at least in my hands, did not extend to recollecting phone numbers received at 3:00 AM beyond 3:01. A dead end.

Or perhaps not. It turned out that the Jacobi operator, bless her heart, had written down the number and against all probability it was still retrievable. In the presence of half the pediatric house staff, who were crowded into the conference room to kibbitz, I placed a call and got—no answer. Great groans. There was some wild talk of extracting the identity of the phone subscriber on the grounds of medical emergency, but cooler heads prevailed. At some point, we thought, Samantha would have to pick up the phone.

But when I phoned again that evening, the phone was answered by a woman who said there was no one there by the name of Samantha Toriani. She was pleasant, cooperative and even gave me her name, appropriately ordinary Jane Miller. When I told her the story and emphasized that I had spoken with Samantha at that very number, she was mystified. She volunteered that she herself was a nurse, working night shifts at present. I suggested that someone might be using her phone while she was at work. She said she couldn't see how that could be, but she would look into it. And that was that.

As soon as I hung up we checked the phone book. Jane Miller was listed at the number I had dialed. Her address was 19 East 101st Street.

A fierce controversy ensued as to whether Jane Miller was an innocent bystander, an accomplice or—the eerie conviction was beginning to take hold—Samantha Toriani's alter ego. The voice sounded similar, but I wasn't sure. Everyone agreed we needed more information.

At that point it occurred to me that phone calls from Samantha had always come after midnight. Accordingly, late that night, during a comparative lull in the action, I dialed the familiar number. The phone was answered by a man. There seemed to be a party going on. I asked to speak to Samantha Toriani.

"Samantha!" he shouted. "Samantha! You've got a phone call!" Party noises continued. Then the man said to someone in the room, "It's for you." I couldn't hear the reply, but he came onto the phone again and asked, "Who's this?"

A dilemma. There was a strong temptation to use an assumed name, but I felt that at least one of us should be sticking to something in the vicinity of the truth. "Dr. Buttenwieser," I answered.

He called out a mangled version of my eminently manglable name, but it was apparently clear enough for Samantha. I couldn't make out her reply, but he relayed it to me from her: "There's no one here by that name," he said.

"Could you check?" I asked. "I've reached her at this number before."

"Look, buddy," he said, in a not unfriendly manner. "Samantha don't want to talk to you. And if you ask me, you don't want to talk to her. Know what I mean?"

I thought I knew what he meant.

At that point I was ready to close the case, or almost. The next day I placed what I hoped would be a final call and reached Jane Miller. Upon being confronted with further evi-

dence, she admitted that she knew Samantha Toriani. Indeed, she was her sister. She said that Samantha was very disturbed and the family was trying to help her. I asked if Samantha was in fact a nurse. She said she had been trained as one, but had never gotten her licence. That wasn't entirely comforting, but I felt I had no standing to intervene any further. Miss Miller was profuse in her apologies and assured me I wouldn't hear from her sister again.

A few days later, all the interns were excused from their duties to take Part III of the National Boards. I was on call that night, so I returned to the hospital after I finished the exam. At supper one of the medical residents came up to me and said, "You should have been here today, Buttenwieser. We had a patient in the ER you would have been interested in. Very interested in."

Since I didn't think my particular medical interests were that widely known, I smelled a rat—which the resident's widening grin confirmed.

"A 26-year-old woman comes in complaining of bilateral hemianopsia. She shows nothing on physical exam, her fundi are normal, etc., etc. On a visual fields exam she gives hesitant, inconsistent responses. It's pretty clear what's going on, but we call in neuro anyway. They spend about three minutes with her and then tell her, in so many words, she's faking it.

"At first she gets indignant, tries to bluff it out, but when she sees that isn't getting her anywhere she breaks down. So we ask her if she wants to see a shrink and she says no, she wants to see you. We tell her, a) he's in pediatrics, b) he's not in the hospital today and c) why you?

"That's when it begins to dawn on us who we're dealing with. She'd given us an assumed name, or another assumed name, as the case may be. Anyhow, we told her you'd be back tonight, she could call you then."

"Thanks a lot."

"Hey, in two months you'll be a psych resident. Think of her as advance practice."

"Just what I need."

The call came, as I suspected it would, between two and three o'clock. Samantha sounded subdued, sad. She said she realized she had some problems, and she wanted to talk to me. I told her I wasn't a psychiatrist, just a pediatric intern. That didn't matter, she said, because she knew I was a sensitive, caring person who could help her. She begged me to see her one time, and then she would never bother me again. Just once. At her apartment.

I said I would be glad see her, but it had to be at the hospital. She said she couldn't come there, it had bad associations, wouldn't I please just one time see her at her apartment? I said that would not be possible. She hung up on me.

I kept expecting another phone call, but that was to be the last. I never spoke to her again.

A week later, though, I did receive a letter:

Dear Dr. Buttenwieser,

I'm sorry to have inconvenienced you with my problems. I realize now how foolish I was to think that there might actually be someone out there who was willing to help someone who was suffering. I won't trouble you any further.

I hope you have a good life.

Samantha Toriani.

Footnote:

Some 15 years later, I wrote a novel called *Free Association* about a young psychiatrist who was constantly having misadventures with his patients outside the office. Since I clearly could not publish anything drawn from my clinical experiences, I went to the tremendous effort of actually inventing all the novel's characters and events. I did feel, however, that my encounter with Samantha Toriani fit perfectly with the novel's theme and, with appropriate disguising of her identity, could easily be reworked into a chapter.

After the novel was accepted for publication, my editor asked for very few revisions. She did, however, recommend that I cut the Samantha Toriani chapter. She said she had liked it a lot, but thought its tone clashed with the rest of the novel. All the other episodes in the novel, she felt, were completely realistic; she easily could imagine them taking place. Samantha Toriani's story was darker, more ambiguous—and less believable. It was the one part of the novel, she said, that was clearly a work of fiction.

And so Samantha Toriani was discharged from my novel and disappeared once again from my life. Her enigmatic predicament, however, has haunted me to this day. I therefore wistfully re-present her here, restored from her brief abduction into the world of letters—unfictionalized except for her own concoctions, plus the distortions and erosions wrought upon memory by time.

Paul Buttenwieser '64, is a psychiatrist, novelist and community activist. He has written the novels Free Association *(Little, Brown and Co., 1981) and* Their Pride and Joy *(Delacorte Press, 1987), has published fiction in* Ploughshares, *and is a contributor to the* New York Times Book Review *and the* Washington Post Book World. *In 1988 he and his wife, Katie, founded the Family-to-Family Project, an initiative that addresses the crisis of family homelessness in Boston. Since then, he has been increasingly involved in a number of community organizations, particularly in the areas of social justice and the arts. He currently practices psychiatry in Cambridge and is working on a third novel.*

**All identifying data in this account are changed, except for the name "Buttenwieser."*


MARCH ON WASHINGTON
FOR
JOBS & FREEDOM
AUGUST 28, 1963
DON'T BUY IN
SEGREGATED
LET'S
LOVE

The House of God:

A Historical Perspective

by Stephen J. Bergman

THE OLDER I GET, THE MORE I REALIZE the importance of the historical context of any particular event. Often this context is invisible. At any given time, we often have the feeling that we are making decisions and taking action and even describing reality based upon a more or less accurate perception of our experience. And yet, looking back from some period of years, we realize that we have been aware of only a small part of the whole, a few of the many forces which were acting upon us. Luckily, looking back, there is the potential to see more and in seeing, grow. That's how it is now with my novel, *The House of God*.

It's been 20 years since I finished my one-year medical internship at a hospital in Boston. It's been 16 years since *The House of God* was published. As the time has gone on, it has become more and more clear that my internship experience—and my writing the novel—was set in a particular historical moment, one which, at the time, we thought was usual and the way life was.

It was called "the '60s," and to our surprise and dismay it has turned out to be neither usual nor the way life has been since. That time was a coming together of nine young men—there were no women in our core group—at a cataclysmic moment in American history, played out on our little stage of learning to become doctors.

We were nourished by the '50s: each of us in our core group grew up in relative prosperity with the sense that, in my mother's words, "all doors are open to you." It was assumed that we would not have to worry about making a living—economic security was in the air. This meant that we felt free to try most anything. We bought into the American dream.

And then we hit college and saw the dream turn to a nightmare: first, the violence provoked by many American's denial of the civil rights movement, and then the violence provoked by many American's embrace of the Vietnam War.

In November 1963 I was sitting in the Harvard stadium during the game with Dartmouth when, shortly before half-time, there was a sudden buzz, an electricity in the crowd, and in an instant—as if we had a single set of eyes—we 10,000 saw President John F. Kennedy come in and sit down. He was hardly five yards in front of me; he looked tan and fit. My roommate got his autograph.

Three weeks later, as I and my roommate were driving down to the Yale game, we heard JFK had been killed. Robert and Martin followed. Malcolm X spoke at Leverett House, heavily guarded. Nixon kept carpet-bombing Cambodia and the Ohio National Guard murdered four students at Kent State. The cities of America went up in flames and in the universities, students went out on strike. My class at Harvard Medical School was just starting the kidney block. A passionate debate ensued with some saying that if we joined the strike, we'd never learn the kidney, others saying the hell with the kidney, this is more urgent. We went out on strike. (I never really did learn the kidney.) Our actions had put the civil rights laws on the books; our actions would end the war.

And so we of my internship came out of medical school in 1973 with the idea that if we saw an injustice, we could work together and take action to change it. "We the People"—the founding vision of our country—had become "All Power to the People" or, more radically, "If You're Not Part of the Solution, You're Part of the Problem." We entered our internship with a clear vision of the conflict at the heart of the '60s: the way things are versus the way things could be. In the hospital this was reframed as: the received wisdom about how to practice good medicine versus our sense both as doctors and as human beings.

We entered our internship on the side of the human, wanting to be human beings who were doctors, helping patients. And yet in our internship we soon found ourselves in situations where what we were told to do was in conflict with what we felt was human to do.

Some of the passages in *The House of God* that seem the most fictional—the most far out and cruel—are the most true. At one point in the novel the interns are told they are not get-

ting enough postmortem permissions and that there will be a contest for the intern with the most "posts" during the year—the prize being a free trip for two to Atlantic City for the AMA-convention in June. This struck us as demeaning and dehumanizing; we thought it was a joke and nicknamed it the "Black Crow Award." It was no joke. One of us won and went to the Jersey shore.

Another example of a true event is a passage about "The Man With Agonal Respirations," where one intern is trying to let his patient, a man with end-stage multiple myeloma, die peacefully. When the man arrests, the room fills with two opposing camps: the dialysis team, which trys to preserve the five grand shunt in his arm and crunches his bones to bits doing CPR, versus the intern who trys to stop them. Again, no joke.

This was part of the larger bind we interns found ourselves in: presented with debilitated and often demented patients who wished to die peacefully (they were called "gomers"—a term I did not invent but merely reported), we interns were told we had to, in the words of one intern, "do everything always for all of them forever to keep them alive." We were called upon to work ourselves silly doing things we did not believe we should be doing.

There were two inhumanities of our internship: first, we were caught in a "power-over" institution, a hierarchy where someone always had power over you and you sometimes had power over somebody else; second, the institution effectively isolated us from one another and isolated what we saw as our authentic experience from what was said to be the "real" experience of the institution. These two inhumanities—power-over and isolation—are related. The enemy of dominance is the quality of the connection among those dominated. It is summed up in the words of one of the interns: "How can we care for our patients, man, if'n nobody cares for us?"

For some doctors, our experience of internship does not ring true. Often these physicians are of a generation before mine. But this picture of these "power-over," isolating, hierarchical structures—which often are our great hospitals—is hardly my idiosyncratic experience. Wherever I go, people see *The House of God* as their hospital—sometimes literally—and my internship as theirs. One doctor wrote to me: "I'm in a V.A. in Tulsa and if it weren't for your book, I'd be going crazy."

Wherever I go, people see The House of God *as their hospital—sometimes literally—and my internship as theirs.*

Fifty commencement speeches later, I sense that the new generation of doctors feels it is having its experience represented in an authentic way, that we share core issues about being doctors that physicians in the past were forbidden to name, reveal or even acknowledge.

For several years I have taught in the HMS Patient/Doctor III course. When these idealistic, enthusiastic, intelligent and sensitive third-year students enter our teaching hospitals, they often come back to our seminars and tell of being treated with insensitivity, rough authority, brutality and outright cruelty. Studies suggest that 80 percent of medical students admit to some form of abuse during their four years, and that the abuse peaks in the third year. Sometimes one can recognize a student starting the third year from one starting the fourth almost by looking at them: the fourth-years are more closed down, guarded, cynical, cautious and reticent. They have been hurt.

Medicine is a reflection of society. The fragmentation and violence of society is reflected in the fragmentation and violence of medicine. Things may be worse now with AIDS, cancer rates rising off the charts, the aged, the effects of violence and broken homes and communities and the farce called "managed" care. Medical students and house staff, on a daily basis, are on the front lines of the war between the received socio-medical "wisdom" and the call of the human heart.

What is the alternative? How do we stay human in medicine? What does a historical perspective suggest we do?

Without knowing that what we were doing was at all unusual, schooled in the '60s idea that we could try to bring more humanity to the system, we interns, as a group, did try to take action during the year; as did I afterwards in writing the novel. Unaware that we were being driven by our '50s sense of security and our '60s sense of justice, we held to our vision that we would not cooperate with the inhumanities we saw in the hospital.

In fact there are signs of hope in *The House of God*. Hope comes from forming "power-with" groups within the institution, which means not becoming isolated, sticking together and speaking up. Speaking up not only calls attention to the wrongs of the system, it is necessary for one's survival as a human being. (Speaking up alone, however, can be hazardous—the messenger may be blamed for the news.) Working on empathy—imagining a loved one as a patient, oneself as a patient—is the heart of staying human. These are some things that, historically, have helped.

As time has passed, I have come to see that the inhumanities of the hospital of my internship were less personal than systemic: everyone caught in these systems gets hurt. There is always someone with power over you,

there is pain at every level. And there is potential for change.

Some things have changed for the better, and I believe that some of these changes come from the '60s generation now being in positions of power. For example, at no time during my internship did anyone talk with me about how to work with a dying patient. Now, attention is being paid. Historical forces are at work on us now of which we have little awareness. I would guess that for every inhumane solidification of our medical institutions, there is a resonant movement toward pliability and creative solution, both within the institutions and in small groups working all over the country, trying to make things new. And half of Americans are seeking out "alternative" health care.

One never knows how a single sprout might grow. In 1935 in Akron, Ohio, two drunks—one a doctor—sat down to talk for 15 minutes. They came out six hours later with an idea that has become the most effective treatment for alcoholism: Alcoholics Anonymous. I choose this example because it flies in the face of the two inhumanities mentioned above: AA is a "power-with" organization, where no one has power over you and you have power over no one (in fact, it is not only a "self-help" organization, but also one of "mutual-help"); and it is an attempt to treat addiction, "a disease of isolation," with a dose of "community." Historically, the path to staying human winds not only through equality, but toward mutuality.

There is a tremendous creative tension in the confluence of "what is" and "what could be." We may have come from the '60s, but what we uncovered was much deeper and bigger than that era. The past is not past: the liberating forces of the '60s are at work today, as universal as the dense forces of the status quo. There is much potential in working for true mutuality in a power-over system, especially a system as personal as the doctor/patient relationship. In a sense, that's why we go into medicine: to be with people at crucial moments in their lives and walk through it with them.

When these idealistic, enthusiastic, intelligent and sensitive third-year students enter our teaching hospitals, they often come back to our seminars and tell of being treated with insensitivity, rough authority, brutality and outright cruelty.

At the end of *The House of God*, there's a dialogue between an intern, Roy, and a resident, the Fat Man:

"Fats, I figured out why you stay in medicine."

"Terrific! Hit me while I'm hot!"

"It's the only profession that's big enough for you."

"Yeah, and you know what?" Fats asked.

"What?"

"It might not be, after all."

"Really?"

"Sure. But that's the game, isn't it?"

"What is?"

"To find out. To see if it matches our dreams."

Stephen J. Bergman '73 (pen-name "Samuel Shem") is a playwright, novelist and psychiatrist. His novels include The House of God *(Dell, 1978) about medical internship, its upcoming sequel* Mount Misery, and Fine *(Dell, 1985). His plays include* Room for One Woman *and* Napoleon's Dinner *(both published in* The Best Short Plays *anthologies). With Janet Surrey he has co-authored a play,* Bill W. and Dr. Bob, *about the relationship between two men that led to the founding of Alcoholics Anonymous, which premiered at the Majestic Theatre, Boston in June (excerpted in Winter 1992/93* Bulletin*). He is a psychiatrist at HMS, chairman of the Committee on Clinical Projects at the HMS Division of Addictions, and is an affiliated scholar with the Stone Center, Wellesley College. With Surrey, he is co-author of the upcoming* Something Might Happen: When Women and Men Connect *(Basic Books).*

RIGOLETTO
Hab' ich vollbracht, was noch muß geschehen,
Dann soll man uns nicht länger hier sehe
OFFIZIER

Poetry from *The Other Man Was Me*

by Rafael Campo

Aida

I've never met the guy next door. I know
He's in there—mud-caked shoes outside to dry,
The early evening opera, the glow
(Of candlelight?) his window trades for night—

I think he's ill, since once the pharmacy
Delivered his prescriptions to my door:
Acyclovir, Dilantin, AZT.
He doesn't go out running anymore.

I've heard that he's a stockbroker who cheats
A little on his taxes. Not in love,
They say—he seems to live alone. I eat
My dinner hovering above my stove,

And wondering. Why haven't we at least
Exchanged a terse hello, or shaken hands?
What reasons for the candlelight? His feet,
I'm guessing by his shoes, are small; I can't

Imagine more. I'd like to meet him, once—
Outside, without apartments, questions, shoes.
I'd say that I'm in love with loneliness.
I'd sing like candlelight, I'd sing the blues

Until we'd finished all the strawberries.
We've never met, and yet I'm sure his eyes
Are generous, alive, like poetry
But melting, brimming with the tears he cries

For all of us: Aida, me, himself,
All lovers who may never meet. My wall—
As infinite and kind-faced as the wealth
Of sharing candlelight—it falls, it falls.

A Medical Student Learns Love and Death

The scalpel finds the heart. The heart is still.
The way it rests, suspended in his chest,
It seems a fruit unharvested, its flesh
Inedible but oddly tempting—swelled
A size I never will forget. My sleeves
Rolled up, I touch, I trace an artery—
A torturous, blockaded road—and free
The muscle from connective tissue sheaths
An unforgotten lover left in place.
My working hands become the fluttering
He must have felt; the lost anatomy
Of his emotions, gardens left in haste.
Past human bodies, no one has evolved.
With these deflated lungs, he's penitent,
He wants to say how love will never end.
I cut, and make from him the grave I rob.

A Dying Art
(for Eve)

The physical's your art: I see
The bones inside us all beneath
Your skin. You write so burningly

It's like Italian on my heart—
A love for body raised to art,
For poetry in voice, a spark

Of knowledge free from shame. Today,
I felt ashamed; my bones became
External, ugly bent in ways

Italian can't express. I knew
My body wasn't art. I knew
It hurt. I craved to be untrue,

An angel of destruction, bent
On finding in the firmament
Each lame-winged bird, each dying friend,

Each ugliness, if ugliness
Exists. You should belong to us,
But we're afraid. I'm not depressed—

I watch us in the magazines,
The body we're imagining,
How strangely well the models seem—

Compared to them, I'm overweight.
I'd die to eat Italian food;
I want to have my cat de-clawed

But then he'd be defenseless. Art,
You'd tell me, ready to depart
Upon your body's shrieking points

For the stars, your baldness breathtaking,
Your wings Italian poetry,
Is only this: the sudden sting,

Our hearts, our bodies razed, the fort
Abandoned, bones and paintings charred.
You live—so write! Until we're cured.

Technology and Medicine

The transformation is complete. My eyes
Are microscopes and cathode X-ray tubes
In one, so I can see bacteria,
Your underwear, and even through to bones.
My hands are hypodermic needles, touch
Turned into blood: I need to know your salts
And chemistries, a kind of intimacy
That won't bear pondering. It's more than love,
More weird than ESP—my mouth, for instance,
So small and sharp, a dry computer chip
That never gets to kiss or taste or tell
A brief truth like "You're beautiful," or worse,
"You're crying just like me; you are alive."

The Distant Moon

I.
Admitted to the hospital again.
The second bout of pneumocystis back
In January almost killed him; then,
He'd sworn to us he'd die at home. He baked
Us cookies, which the student wouldn't eat,
Before he left—the kitchen on 5A
Is small, but serviceable and neat.
He told me stories: Richard Gere was gay
And sleeping with a friend of his, and AIDS
Was an elaborate conspiracy
Effected by the government. He stayed
Four months. He lost his sight to CMV.

II.
One day, I drew his blood, and while I did
He laughed, and said I was his girlfriend now,
His blood-brother. "Vampire-slut," he cried,
"You'll make me live forever!" Wrinkled brows
Were all I managed in reply. I know
I'm drowning in his blood, his purple blood.
I filled my seven tubes; the warmth was slow
To leave them, pressed inside my palm. I'm sad
Because he doesn't see my face. Because
I can't identify with him. I hate
The fact that he's my age, and that across
My skin he's there, my blood-brother, my mate.

III.
He said I was too nice, and after all
If Jodie Foster was a lesbian,
Then doctors could be queer. Residual
Guilts tingled down my spine. "OK, I'm done,"
I said as I withdrew the needle from
His back, and pressed. The CSF was clear;
I never answered him. That spot was framed
In sterile, paper drapes. He was so near
Death, telling him seemed pointless. Then, he died.
Unrecognizable to anyone
But me, he left my needles deep inside
His joking heart. An autopsy was done.

IV.
I'd read to him at night. His horoscope,
The New York Times, The Advocate;
Some lines by Richard Howard gave us hope.
A quiet hospital is infinite,
The polished, ice-white floors, the darkened halls
That lead to almost anywhere, to death
Or ghostly, lighted Coke machines. I call
To him one night, at home, asleep. His breath,
I dreamed, had filled my lungs—his lips, my lips
Had touched. I felt as though I'd touched a shrine.
Not disrespectfully, but in some lapse
Of concentration. In a mirror shines

The distant moon.

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Angel of Mercy, Angel of Wrath

by Ethan Canin

On Eleanor Black's 71st birthday a flock of birds flew into her kitchen through a window that she had opened every morning for 40 years. They flew in all at once, without warning or reason, from the ginko tree at the corner of Velden Street where they had sat every day since President Roosevelt's time. They were huge and dirty and black, the size of cats practically, much larger than she had ever imagined birds. Birds were so small in the sky. In the air, even in the clipped ginko 10 yards from the window, they were nothing more than faint dots of color. Now they were in her kitchen, though, batting against the ceiling and the yellow walls she had just washed a couple of months ago, and their stink and their cries and their frantic knocking wings made it hard for her to breathe.

She sat down and took a water pill. They were screaming like wounded animals, flapping in tight circles around the light fixture so that she got dizzy looking at them. She reached for the phone and pushed the button that automatically dialed her son, who was a doctor.

"Bernie," she said, "there's a flock of crows in the flat."

"It's five in the morning, mom."

"It is? Excuse me, because it's seven out here. I forgot. But the crows are flying in my kitchen."

"Mother?"

"Yes?"

"Have you been taking all your medicines?"

"Yes, I have."

"Has Dr. Gluck put you on any new ones?"

"No."

"What did you say was the matter?"

"There's a whole flock of crows in the flat."

Bernie didn't say anything.

"I know what you're thinking," she said.

"I'm just making the point that sometimes new medicines can change people's perceptions."

"Do you want to hear them?"

"Yes," he said, "that would be fine. Let me hear them."

She held the receiver up toward the ceiling. The cries were so loud she knew he would pick them up, even long distance.

"OK?" she said.

"I'll be damned."

"What am I supposed to do?"

"How many are there?"

"I don't know."

"What do you mean, you don't know?"

"They're flying like crazy around the room. How can I count them?"

"Are they attacking you?"

"No, but I want them out anyway."

"How can I get them out from Denver?"

She thought for a second. "I'm not the one who went to Denver."

He breathed out on the phone, loud, like a child. He was chief of the department at Denver General. "I'm just making the point," he said, "that I can't grab a broom in Colorado and get the birds out of your place in New York."

"Whose fault is that?"

"Mom," he said.

"Yes?"

"Call the SPCA. Tell them what happened. They have a department that's for things like this. They'll come out and get rid of them."

"They're big."

"I know," he said. "Don't call 911. That's for emergencies. Call the regular SPCA. OK?"

"OK," she said.

He paused. "You can call back later to let us know what happened."

"OK."

"OK?"

"OK." She waited a moment. "Do you want to say anything else?"

"No," he said.

She hung up, and a few seconds later all the birds flew back out the window except for two of them, which flew the other way, through the swinging door that she had left open and into the living room. She followed them in there. One of them was hopping on the bookshelf, but while Eleanor watched, the other one flew straight at the window from the center of the room and collided with the glass. The pane shook and the bird fell several feet before it righted itself and did the same thing again. For a few moments Eleanor stood watching, and then she went to the kitchen, took out the bottle of cream soda and poured herself a glass. Yesterday it had been a hundred degrees out. When she finished she put the bottle back, sat down again and dialed 911.

"Emergency," said a woman.

Eleanor didn't say anything.

"911 Emergency."

"There's a flock of crows in my apartment."

"Birds?"

"Yes."

"You have to call the SPCA."

"They're going to break the window."

"Listen," she said, "We're not supposed to give this kind of advice, but all you have to do is move up quietly behind a bird and pick it up. They won't hurt you. I grew up on a farm."

"I grew up here."

"You can do that," she said, "or you can call the SPCA."

Eleanor hung up and went back to the living room. One still perched itself on the edge of her bookshelf and sat there, opening and closing its wings, while the other one, the berserk one, flew straight at the front window, smashed into it, fell to the sill and then took to the air again. Again and again it flew straight at the window, hitting it with a sound like a walnut in a nutcracker, falling to the sill, then flapping crookedly back toward the center of the room to make another run. Already the window had small blotches of bluish feather oil on it. The bird hit it again, fell flapping to the sill, and this time stayed there, perched. Through the window Eleanor noticed that the house across the street from her had been painted green.

"Stay there," she said. "I'm going to open the window."

She took two steps toward the bird, keeping the rest of her body as still as she could, like a hunting dog, moving one leg, pausing, then moving the other. Next to her on the bookshelf the calm bird cocked its head in little jerks—down, up, sideways, down. She advanced toward the window until the berserk one suddenly flew up, smashed against the glass, fell to the sill, flew up again, smashed, and perched once more. She stopped. It stood there. To her horror Eleanor could see its grotesque pulse through its skin, beating frantically along the wings and the torso as if the whole bird were nothing but a speeding heart. She stood perfectly still for several minutes, watching.

"Hello," she said.

It lifted its wings as though it were going to fly against the window again, but then lowered them.

"Why can't you be like your

friend?" She pointed her chin at the one on the bookshelf, which opened its beak. Inside, the throat was black. She took another step toward the window. Now she was so close to the berserk one she could see the ruffled, purplish chest-feathers and the yellow ring around its black irises. Its heart still pulsated but it didn't raise its wings, just cocked its head the way the other one had. She reached her two hands halfway toward it and stopped. "It's my birthday today," she whispered. She waited like that, her hands extended, until she had counted to 71. The bird cocked and retracted its head, then stood still. When it had been still for a while she reached the rest of the way and touched her hands to both sides of its quivering body.

For a moment, for an extended, odd moment in which the laws of nature didn't seem to hold, for a moment in which she herself felt just the least bit confused, the bird stood still. It was oily and cool, and its askew feathers poked her palms. What she thought about at that second, of all things, was the day her husband Charles had come into the living room to announce to her that President Eisenhower was going to launch missiles against the Cubans. She had felt the same way when he told her that, as if something had gone slightly wrong with nature but that she couldn't quite comprehend it, the way right now she couldn't quite comprehend the bird's stillness until suddenly it shrieked and twisted in her hands and flew up into the air.

She stepped back. It circled through the room and smashed into the glass again, this time on the other window next to the bookshelf. The calm bird lighted from its perch, went straight down the hall and flew into her bedroom. The berserk one righted itself and flew into the glass again, then flapped up and down against it, pocking the wide pane with its wings like a moth. Eleanor went to the front window, but she couldn't open it because the Mexican boy who had painted the apartments last year had broken the latch. She crossed into the kitchen and looked up the number of the SPCA.

A child answered the phone. Eleanor had to think for a second. "I'd like to report two crows in my house," she said.

The child put down the phone and a moment later a woman came on the line. "I'd like to report two crows in my house," said Eleanor. The woman hung up. Eleanor looked up the number again. This time a man answered. "Society," he said.

"There are two crows in my house," said Eleanor.

"Did they come in a window?"

"I always have that window opened," she answered. "I've had it opened for years with nothing happening."

"Then it's open now?"

"Yes."

"Have you tried getting them out?"

"Yes, I grabbed one the way the police said but it bit me."

"It bit you?"

"Yes. The police gave me that advice over the phone."

"Did it puncture the skin?"

"It's bleeding a little."

"Where are they now?"

"They're in the living room," she said. "One's in another room."

"All right," he said. "Tell me your address."

When they had finished Eleanor hung up and went into the living room. The berserk one was perched on the sill, looking into the street. She went into the bedroom and had to look around a while before she found the calm one sitting on top of her lamp.

She had lived a long enough life to know there was nothing to be lost from waiting out situations, so she turned out the light in the bedroom, went back into the living room, took the plastic seatcover off the chair President Roosevelt had sat on, and, crossing her arms, sat down on it herself. By now the berserk bird was calm. It stood on the window sill, and every once in a while it strutted three or four jerky steps up the length of the wood, turned toward her, and bobbed its head. She nodded at it.

The last time the plastic had been off that chair was the day Richard Nixon resigned. Charles had said that Franklin Roosevelt would have liked it that way, so they took the plastic off and sat on it that day and for a few days after, until Charles let some peanuts fall between the cushion and the arm and she got worried and covered it again. After all those years the chair was still firm.

The bird eyed her. Its feet had four claws and were scaly, like the feet on a butcher's chicken. "Get out of here," she said. "Go! Go through the window you came from." She flung her hand out at it, flapped it in front of the chair, but the bird didn't move. She sat back.

When the doorbell rang she got up and answered on the building intercom. It was the SPCA, though when she opened the door to the apartment she found a young Negro woman standing there. She was fat, with short, braided hair. After the woman had introduced herself and stepped into the apartment, Eleanor was surprised to see that the hair on the other side of her head was long. She wore overalls and a pink turtleneck.

"Now," she said, "where are those crows you indicated?"

"In the living room," said Eleanor. "He was going to break the glass soon if you didn't get here."

"I got here as soon as I received the call."

"I didn't mean that."

The woman stepped into the living room, swaying slightly on her right leg, which looked partly crippled. The bird hopped from the sill to the sash, then back to the sill. The woman stood motionless with her hands together in front of her, watching it. "That's no crow," she said finally. "That's a grackle. That's a rare species here."

"I grew up in New York," said

Eleanor.

"So did I." The woman stepped back, turned away from the bird and began looking at Eleanor's living room. "A crow's a rare species here too, you know. Some of that particular species gets confused and comes in here from Long Island."

"Poor things."

"Say," said the woman. "Do you have a little soda or something? It's hot out."

"I'll look," said Eleanor. "I heard it was a hundred degrees out yesterday."

"I can believe it."

Eleanor went into the kitchen. She opened the refrigerator door, stood there, then closed it. "I'm out of everything," she called.

"That's all right."

She filled a glass with water and brought it out to the woman. "There you go," she said.

The woman drank it. "Well," she said then, "I think I'll make the capture now."

"It's my birthday today."

"Is that right?"

"Yes, it is."

"How old are you?"

"Eighty-one."

The woman reached behind her, picked up the water glass, and made the gesture of a toast. "Well, happy 81st," she said. She put down the glass and walked over and opened the front window, which still had smudges on it. Then she crouched and approached the bird on the other sill. She stepped slowly, her head tilted to the side and her large arms held in front of her, and when she was a few feet before the window she bent forward and took the bird into her hands. It flapped a couple of times and then sat still in her grasp while she turned and walked it to the open window, where she let it go and it flew away into the air.

When the woman had left, Eleanor put the plastic back on the chair and called her son again. The hospital had to page him, and when he came on the phone he sounded annoyed.

"It was difficult," she said. "The fellow from SPCA had to come out."

"Did he do a decent job?"

"Yes."

"Good," he said. "I'm very pleased."

"It was a rare species. He had to use a metal-handled capturing device. It was a long set of tongs with hinges."

"Good. I'm very pleased."

"Are you at work?"

"Yes, I am."

"OK, then."

"OK."

"Is there anything else?"

"No," he said. "That's it."

A while after they hung up, the doorbell rang. It was the SPCA woman again, and when Eleanor let her upstairs she found her standing in the hall with a bunch of carnations wrapped in newspaper. "Here," she said. "Happy birthday from the SPCA."

"Oh my," said Eleanor. "They're very elegant. Why, thank you very much." For a moment she thought she was going to cry. She took them and laid them down on the hall vanity. "Would you like a cup of tea?"

"No, thanks. I just wanted to bring them up. I've got more calls to take care of."

"Would you like some more water?"

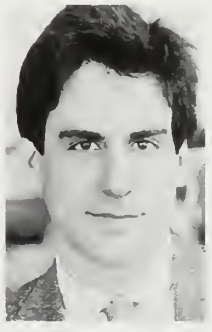
"That's all right," said the woman. She smiled and touched Eleanor on the shoulder, then turned and went back downstairs. Eleanor closed the door and unwrapped the flowers. She looked closely at their lengths for signs that they were a few days old, but could find none. The stalks were unswollen and cleanly clipped at an angle. She brought them into the kitchen, washed out the vase, and set them up in it. Then she poured herself a half glass of cream soda. When she was finished she went into the bedroom to the bedside table, where she took a sheet of paper from the drawer and began a letter.

Dear President Bush,

I am a friend of President Roosevelt's writing you on my eightieth birthday on the subject of a rare species that came into my life without warning today, and that needs help from a man such as yourself.

She leaned up straight and examined the letter. The handwriting got smaller at the end of each line, so she put the paper aside and took out a new sheet. At that moment the bird flew down and perched on the end of the table. Eleanor jerked back and stood up from the chair. "Oh," she said, and touched her heart. "Of course."

Then she patted her hair with both hands and sat down again. The bird tilted its head to look at her. Eleanor looked back. It's coat was black but she could see irridescent gleams in the chest feathers. It strutted a couple of steps toward her, flicking its head left, right, forward. Its eyes were dark. She put out her hand, leaned a little bit, and moving it steadily and slowly, touched the feathers once and withdrew. The bird hopped and opened its wings. She sat back and watched it. Sitting there, she knew that it probably didn't mean anything. She was just a woman in an apartment, and it was just a bird that had wandered in. It was too bad they couldn't talk to each other. She would have liked to know how old the bird was, and what it was like to have lived in the sky.



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HARLEQUIN

Artistic Expression

by Perri Klass

MIRIAM'S FANTASY OF HER MARRIAGE, of herself and Jamie, is an image of something that has never actually happened. The two of them sit together on a gleaming jewelbox stage of polished wood, like the one in Jordan Hall, and they play duets. All around them, the air has that concert hall hush of respect and expectation, the educated ecstasy of the educated ear appreciating harmony. And it is for her and for Jamie on the piano and her own fingers vibrating passionately on the violin.

So she lets this imaginary music lull her to sleep at night when he has already conked out, dead tired, or she thinks of him this way when he's away at a conference, or occasionally she even looks out the passenger window of their car as they go off to buy groceries on Saturday morning, and sees not the well-disciplined lawns and porches of their town, but that stage, that concert hall, those exalted musicians. Jamie and herself. She has never in her life seriously thought of playing music in public, has never played a duet with her husband even in private; it's as remote as a fantasy of the two of them dancing on iceskates in the Olympics. Whatever floats your boat.

She does play the violin, or rather did. And he does play the piano, and rather better. And unlike her, he kept taking lessons right through medical school and residency, explaining rather too frequently, with what she came to feel was slightly priggish satisfaction, that medicine nurtured his mind, but music nurtured his soul. Jamie is, you would have to admit, Miriam does have to admit, a little prone to repetitive formulations. Now he occasionally plays for pleasure in the evening, but more often plays to urge his daughters along with their piano practicing: like this, listen. And Miriam hasn't really played the violin since college, and even then she was losing interest, or rather, realizing that despite an excellent sense of timing, she would never produce sounds she wanted to hear. She wondered whether the violin had been all along a high school stunt to be well rounded for college admissions, and then a college stunt to be well rounded for medical school. If Jamie likes to believe in comforting formulas, Miriam is perhaps too far in the other direction: she doubts all her own motives, even more than she doubts everyone else's.

And so she wonders, why is she now, rather suddenly, writing a book? Jamie, if she tells him, if she shows it to him, will probably concoct a story of a silent struggle for self-expression; for years, he will explain to her, she has ached to create, to speak to the world. Perhaps he will even bring up the violin, point out that her musical voice was silenced, and so she has picked up the pen. Or rather, the word processor.

But it isn't true. Miriam has always been a reasonably voracious reader of trashy fiction, occasionally branching out to the marginally literary best-sellers that so often get made into bad movies. Her progress through life has been marked by the creased and ravaged spines of paperback novels. But, to her best recollection, she has never yearned to write her own.

She started the novel one weekend when she was on call for her own pediatric group practice, and cross-covering for two others. The phone rang constantly, the sun was shining, and Jamie was doing the taxi service routine: older daughter to ballet followed by a sleepover, younger daughter to gymnastics-theme birthday party. Miriam, who is more comfortable with computers than many of her colleagues, having worked on and off as a data processor back in medical school, tracks her on-call phone conversations on the computer. She has adapted a reasonably simple program with all the appropriate prompts, and she keys into it each time the service calls.

For the last two years the quality assurance consultants at her practice have been requiring stringent record-keeping for phone calls and phone advice, and the computer program satisfies what she thinks of as her rather tidy everything-in-its-place inner soul. She has offered it to the other doctors on the call rotation, but only one slightly younger man at one of the other practices has taken her up on it. The others, especially the older men, are either wary of computers or resentful that they have to write everything down in the first place. Offer them a computer program and you risk provoking a lecture on how the fear of liability is strangling medicine as we know it.

Anyway, that's why Miriam was spending that lovely spring day tied to the computer; it was an April weekend on which the end of the intestinal virus season handily overlapped with the beginning of the trauma season, and every child in a three-town radius needed either rehydration or an x-ray. Phone rings. Hit ENTER. Type type type, name of child, age, home phone

number. Select primary MD and kind of insurance from lists of possibilities. Chief complaint. Select a menu: vomiting/diarrhea, fever, trauma, rash, etc., and select yes or no to a list of questions. Type type type. Give advice. Send them to the emergency room, tell them to call the office Monday morning for an appointment, tell them to call back if it doesn't get better. Type type type.

No denying it, it satisfied her soul. At the same time, of course, she was annoyed and antsy at the constant calls. Felt that usual occasional desire to snap at that father with the probably spurious British accent: well, did your mother call the doctor on a Sunday when you had a couple of bugbites on your leg, Lord Snickerty-Snootery? Didn't do it, of course, just told him to go get some calamine lotion.

Phone rings, hit ENTER, type type type, talk talk talk. Not the rhythm one would choose, perhaps, with the sky blue and the sun shining, but not the worst rhythm in the world. And that was the day when without really planning to, after one particularly unusual phone call, Miriam opened a screen and began to write a book of her own. Type type type.

❦ ❦ ❦

This image of marriage. This subject of marriage. They are not a couple given to dramatic anniversary celebrations. In a couple of months, it will be 11 years since a rather disconcertingly cold and rainy summer day turned the wedding they had planned for the garden of a splendid Victorian mansion on the North Shore into an overcrowded indoor event with women shivering in damp spring dresses and waiters squirming through the crowd with trays of canapés. Jamie will remember and perhaps stop on the way home and buy her flowers; Miriam will think all day, each time she writes the date in a patient's chart—oh yes, today. After the children are asleep, they'll open a bottle of wine, drink it while they make their ordinary evening talk about their days, go to bed at the same time and make love, week night or no, early morning hospital rounds or no. And that will be observance and consecration, Miriam thinks; marriage not as large-scale gala, subject to weather and whim, but marriage as daily life.

A couple playing duets on a gleaming stage. See how we speak in notes so purely lovely that they rise like golden bubbles into the air and hover over the heads of our rapt, appreciative listeners.

A couple playing duets on a gleaming stage. See how we do not need to look directly at one another, how we pick up cues from every tiny nuance of sound and vibration. See how we speak in notes so purely lovely that they rise like golden bubbles into the air and hover over the heads of our rapt, appreciative listeners.

Small celebration rituals have evolved between them. The late-night bottle of wine for their anniversary. His birthday breakfast: the cardiologist's nightmare for the cardiologist on his birthday; the breakfast that Miriam knows he dreams about all year long, registers on each and every menu he sees, but would never never order or cook. The whole thing: three sunny-side eggs, bacon and sausage and ham, toast oozing butter, cream in his coffee. Every year he makes the same joke about how she's trying to see he won't have too many more birthdays; every year he cleans his plate.

Jamie is the kind of man who, in addition to his sincere and serious beliefs in what he was taught, would feel hypocritical and tarnished if he disobeyed the advice he gives his patients. Miriam, who believes the world is ruled by chance and luck, would buy butter more often, but Jamie has succeeded in indoctrinating both his daughters to the point where even they have trouble enjoying his birthday breakfast. Mom, why did you get whole milk?

Their puritanism, unlike their father's, does not actually extend to what they order in fast-food restaurants, but they supervise their parents severely. Jamie says it's because Sarah and Emily want their parents to live forever; Miriam thinks it's because they want to jerk their parents around.

It is a marriage, Miriam supposes, like other marriages. True, she does not exactly understand other marriages, cannot imagine the content of other lives. Not that part, not the coming home to that one other person who is not Jamie. Not that he is perfect; he is just, somehow, all that is imaginable. A good marriage, a successful marriage. Oh, of course she would say, and she would mean it, that her career has always been the career sacrificed to the interests of the children, the interests of the marriage. True enough. But Jamie would say (not that they would ever force each other to have this conversation) that he has been an active and concerned father, shaving his own work schedule to fit his family's needs far more than, say, his own father would ever have considered doing. And this is also true. Is that the point of the duet then, two separate truths existing in counterpoint and harmony? You sing your song and I sing mine?

That sunny Sunday, the call that Miriam got that set her off writing her novel. You wonder what it was. It was a call from a mother who, unusually enough, apologized over and over for

Is that the point of the duet then, two separate truths existing in counterpoint and harmony? You sing your song and I sing mine?

recently?" Miriam asked, giving up on the daughter's age.

"And you might be right, that might be part of it. But I don't think that's the whole story."

The call-waiting beeped and Miriam excused herself, put the mother on hold, and took another call from the answering service: five-year-old girl might have hives. She scribbled down the phone number and clicked back to the first call, and as soon as she said hi, the mother continued talking, her tone calm and confiding.

"Of course it isn't what we're used to, here at the motel, and I do tell her I don't want her hanging around with the crowd of kids they get here. And I'm very careful not to say anything bad to her about her father, because after all, he is her father, no matter what else he is. But I mean, what is she going to think about him anyway, with him in a beautiful townhouse with a deck and all, over in that development with the landscaping and the duckpond, while we have to walk along the highway to get to the convenience store? And don't think it's what I'm accustomed to, the prices they charge you—and the junk food! And I always told her it was so important to eat fresh produce. As a doctor, I'm sure you can appreciate that."

"Is there something I can help you with?" Miriam asked. But in spite of herself, she felt her brain rushed by unaccustomed images: the husband drinking a cocktail on the deck, looking out over the duckpond; the mother and daughter trudging home on the shoulder of a busy highway with their plastic shopping bag full of chips and dip.

"Are you married, doctor? You're a married woman?"

"Yes, I am. Is there something I can help you with?" So I can get off the phone and call the parents of the child with hives and make sure she isn't having an anaphylactic reaction by now with her face getting puffy and her throat closing up.

"Take my advice then and don't expect too much. Now everything may be perfect and you may think you're the queen of Sheba. I know I did. Do you know what he gave me on Valentine's Day, back only a year ago, before things started to go wrong?"

"I have another call I have to make," Miriam said. "If you have a question for me—"

"What makes things happen the way they do?" the woman said, still in that same confidential almost chirpy tone. "However did my life get all twisted up this way—it's like I'm in some other person's life, that's what I think. Eating some other person's bologna sandwiches on hamburger rolls. Thank you for your kind advice, but I'm afraid it's not for me." And she hung up.

The child with hives was just fine, it turned out. She always got hives after eating strawberries.

❦ ❦ ❦

Jamie and Miriam's was a medical school flirtation, romance, cohabitation, engagement and marriage. Perhaps, Miriam thinks, after she is well launched into this book she had never planned to write, perhaps that is why medical school seems like such an obvious setting for the various romantic events she is inventing. And though this book bears no relation at all to her own real life, in medical school or

after, now that she is writing it, now that she has discovered this strange power to make things happen, call the shots, decide her characters' lives, Miriam has also begun narrating her own life and the lives around her. She finds herself summing up the future in quick parenthetical asides.

The book is a story about three young women who meet in the first year of medical school and agree to share an apartment off campus. The first section covers medical school: one studies hard and falls hopelessly in love with a handsome anatomy professor, one aces her courses without even trying and sleeps around, and the third struggles academically, almost flunks out, and pairs off with a serious student one class ahead who tutors her.

The second section of the book sends this same trio through residency, when all are still living in Boston, though no longer together. One does surgery (she is one of the first women to do a surgical residency at a hypercompetitive macho teaching hospital); one does pediatrics (she is the motherly heart and soul of her residency program); and one does dermatology (she gets into a fight with her residency director when she complains about the prurient remarks made by one of her attendings).

One marries and has her marriage fall apart during residency, one sleeps around, and the third finds true love with the hospital chaplain, a former Olympic hurdler. And then in the third and last section of the book, they pursue their careers, scattered now geographically but meeting for a week out of every year at a spa in Arizona. One becomes a hot-shot cardiothoracic surgeon, one a primary care pediatrician who works in the inner city, and one a Park Avenue dermatologist. One casts herself desperately into the dating market, placing personal ads and going off on singles weekends, one sleeps around, one marries and has children.

Oh, and of course, their hair. One has long straight blonde hair, one has short brown frizz, and one has a shoulder-length auburn pageboy. All three are, as required by the conventions, extremely beautiful: one has movie-star glamour, one has an innocent soulful loveliness, and one has a glowing healthy all-American look. No particular prize for guessing who is who. Or for guessing which one finally finds true love at the end, which one discovers that her marriage is built on a lie, and which one gets cancer, provoking the book's bittersweet finale of shared memories and loyal friendship.

No particular prize for guessing who is who. Or for guessing which one finally finds true love at the end, which one discovers that her marriage is built on a lie, and which one gets cancer, provoking the book's bittersweet finale of shared memories and loyal friendship.

It completely astonishes Miriam how readily this book unscrolls, spilling out onto her computer screen. It amazes her that she can get up from writing pages and pages of this stuff and walk into the kitchen, her mind still tracking the heroine with the short brown hair, to find her own life waiting, most particularly to find her two daughters (both of whom, not that it particularly signifies, have dark honey-colored hair down to their midlumbar regions). And it amazes her most of all that neither Sarah and Emily nor their father, Jamie, can see that there are other stories in her mind, that she is watching other people act and listening to their conversations, people Sarah and Emily and Jamie cannot see or hear.

But then again, isn't she always? There are so often patients on her mind, as there also are on Jamie's, she knows. At night they tell each other the ones they are most worried about, though of course, neither really understands the other's preoccupation. He is a cardiologist who still does much of his work in a big teaching hospital; she is a suburban pediatrician. Every once in a while she brings home an electrocardiogram and asks his opinion on it; every so often he sees a patient who tells him about some childhood problem he can't quite identify, and he brings it home to ask her.

Sarah, who is six, tells them both frequently that she wants to be a doctor; Miriam suspects that she sees this as a way of scoring points off of Emily, who is eight and wants only to be a ballerina. She does not have the figure for it, and probably never will, Miriam thinks—Miriam does not have the figure for it either. Like Emily, she is short and just a few steps on the athletic side of chunky.

Miriam knows that she tends to be hard on herself, knows that she needs to be gentler with her daughters. She knows that only a cruel harsh person would mock Emily's dream of starring in "The Nutcracker," to which her parents dutifully take her, each and every December, her solid round body appropriately zipped into a velvet dress with lace at neck and cuffs.

And yet, and yet. There is something about Emily's mooning after leotards and toe shoes and sugar plum fairies that Miriam finds intensely irritating. And so, yes, she does smile and nod perhaps a touch too enthusiasti-

cally when Sarah starts her I-want-to-be-a-doctor-like-my-mommy-and-my-daddy routine. (In the end, though, paradoxically, Emily will be the one who becomes the doctor. She will turn out to have an unexpected knack for science, will amaze her teachers and her parents by winning a national science prize in high school, and will wind up with an MD/PHD and a career as a research oncologist.

Sarah, on the other hand, will become a journalist, a foreign correspondent, wearing one of those jackets with all the little pockets, flying all over the world to trouble spots. Her parents, when they read of a civil war breaking out somewhere, will react on an intensely personal level: Oh no, Sarah must be there. Please let her be all right. And in fact, she always is. No, never mind, wash out the trouble spots of the world. Sarah will become an important political journalist who works in Washington, DC, where she knows all the movers and shakers, or maybe she'll become a commentator on National Public Radio.)

In addition to Emily's ballet and Sarah's gymnastics, both girls take piano lessons. Jamie oversees this aspect of their education and supervises their practicing. He is able to say, night after night, with a perfectly straight face, someday you'll thank me for making you do this. Miriam actually likes the sound of practicing, but cannot stand the squabbling that often comes before: make her do hers first, she stopped early last night, why do I have to when I don't want to take any more lessons, it isn't fair.

One night when the girls are particularly resistant, Miriam abandons the living room altogether, retreats into the den, the computer. Switches it on and her other world rises to greet her, swarms up around her. Decisions to make with every sentence: it is that kind of novel. Full of events. Should the dermatologist go away for a weekend in the French Caribbean with the very wealthy, extraordinarily handsome, but probably married corporate CEO who sat next to her when she flew to her continuing medical education course?

Her book is not a book about a life she wants to live, or has ever imagined living. It is an alternate universe, with laws of its own.

Miriam reflects for a moment on her own most recent journey to a continuing medical education course: she and Jamie and the girls packed into the station wagon and drove to a convention center in the Berkshires. Sarah got carsick, as she always does, but thank goodness was able to give them enough warning. Emily made nasty comments about her sister's weak stomach and the smell of her breath, and Sarah grabbed the ring that Emily had gotten at the dentist's the week before. The "stone" came out of the ring and Emily pulled Sarah's hair, and Jamie had to turn off the music (Prokofiev, played loud) and threaten to pull off the road again—or rather not to pull off the road for the promised Burger King rest stop later on.

This contrast does not seem either funny or ironic to Miriam, not even as she listens to the loud deliberate plonk-plonk of Emily doing scales she does not want to do. Her book is not a book about a life she wants to live, or has ever imagined living. It is an alternate universe, with laws of its own, with alternate gravitational forces, which she understands well from years of reading other books obedient to those same forces. Gravitational forces that dictate the seating placement on the airplane when the beautiful blond dermatologist flies from one city to another.

That night, after the practicing is over and the girls are in bed, Jamie asks her for the first time about why she is spending so much time at the computer.

"I'm writing down some things," she says. "Some things I've been thinking about."

"Great!" says Jamie, and she can see immediately what he is imagining. Sensitive essays about patients and doctors. Sick children I have known. Probably not the world's most glamorous auburn-haired cardiothoracic surgeon realizing that the man she is supposed to take to the operating room tomorrow for life-or-death open-heart surgery is the father she never knew.

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In fact, they celebrate their anniversary at Emily's ballet recital. Miriam may preserve a slightly cynical distance from her older daughter's endeavors in this direction. She may remark on the delusional state of some of the other mothers in the ballet class, the ones who stand and watch the class, remarking on which girl has good turn-out or impressive elevation. But Miriam's derision does not mean she is immune to stage fright on her daughter's behalf, and when Emily prances out, a sturdy round fairy with an excellent sense of timing, Miriam sits forward in her seat, clutching her elbows, and follows her every move.

In her relief and slightly self-conscious pride when Emily does well, there is mixed a certain guilty glee when it is another girl, a blonde sylph who looks much too much like a Degas drawing, who bangs into another dancer and falls down clump on her slender behind. (That blonde girl will continue to dream of being a professional dancer, and people will expect great things from her because she will continue to look the part. But she will always be a little clumsy, a lit-

tle off the music, and eventually she will give it up. And then she will become a supermodel and make millions of dollars advertising makeup she doesn't need. No, then she will decide to go to college and study clinical psychology. She will spend years running rats through mazes, and end by revolutionizing her field. Meanwhile, Emily, whom no one had taken seriously as a dancer, will blossom out as a revolutionary choreographer and performer who combines elements of classical ballet with modern forms in a way no one has ever attempted before.)

Jamie is up at the front, taking videos. Naturally. All fathers are up at the front, taking videos. It's a little hard to see past them. When Emily's group leaves the stage, to loud applause, and the older girls come on, Miriam closes her eyes for a few seconds. The big day, the recital. The recital that has been the focus of Emily's life, the date that has been repeated and circled on the calendar. And it turned out to be their anniversary. Oh yes, today. And that image of a couple playing duets on a concert stage comes flowing into her mind like music.

(She and Jamie will live out their lives together. Neither will ever be able to imagine life away from the other. They are mated once and for all, unlikely though that may be. The truth is, though her mind is full of ideas for everyone's destiny, for dramatic choices, she cannot imagine anything for Jamie but a good and honorable life, a long and successful marriage, a useful and distinguished career. Now, on this anniversary, in this audience of parents, she grants him this, and grants it with the new authority that comes with making up your story: he is a good man and a man of his word.)

After the recital, they take the girls for ice cream. They come home and there's a message on the answering machine for Jamie from a colleague. An emergency arising on one of Jamie's patients; the colleague was cross-covering but was sure Jamie would want to know. And right he was. Jamie ends up spending the next two hours on the phone, while Miriam puts both girls to bed, tells Emily how much she enjoyed the performance, tells Sarah, that yes, she can take ballet next year if she really wants to. Pauses outside the doors of their rooms, feeling once again that everything-in-it-place satisfaction that every parent understands; the children are safe, clean, sleeping the sleep they need in their own familiar beds. She'll give them half an hour, then sneak in and smooth back their hair and kiss their foreheads.

She is sitting and typing at the computer when all of a sudden all the electricity in the house goes off. Now you see it, now you don't.

But for the half hour, while Jamie talks on the phone and the girls sleep, she'll turn on her computer. Give somebody a new love affair to celebrate her own anniversary, maybe. Destroy the book pediatrician's marriage to mark her own. Just because you have that healthy all-American glow doesn't mean you also get a successful marriage, sweetheart.

She is sitting and typing at the computer—a complex subplot about a bone marrow transplant and a long-lost identical twin mixing itself up with the marital woes of the brown-haired pediatrician—when all of a sudden all the electricity in the house goes off. Now you see it, now you don't. The computer screen goes dark with a sad little whoop, a decrescendo into nothing. All the lights are gone. Jamie is yelling from the kitchen, where the phone is the only thing still working.

Miriam, who enjoys being efficient in time of crisis, leaves the computer and bustles around. Soon she has four different candles in the kitchen, and flashlights ready to hand. By candlelight she looks through the yellow pages and finds a 24-hour electrician answering service, calls and leaves her number, feeling more than entitled to do so—doesn't she put in her 24-hour coverage when it's her turn? And then suddenly begins to worry desperately about her book, about what happened to what is written on the computer disk when the electricity went off. She is sure she can remember awful stories about hard drives erased and memory destroyed. And she has never printed out even part of her book; it has never existed on the page.

Miriam, who never cries, is shocked to find herself very near tears. What if it is lost? What if it is gone? Would she ever be able to write it again? No, not the way it was. It is a new feeling, this sense that she has created something she would never be able to reproduce exactly. No, please don't let it be lost. Please, she thinks, I'll print it out, I'll give it to Jamie to read. Only let me have it back and let it be all right. Though she cringes a little at the thought of Jamie reading it; he is such a straight-shooter when it comes to books, such a reader of political biography and thick well-reviewed volumes of popular history. He has never read a book about the intertwined lives of several ridiculously beautiful women; probably he doesn't know such books exist.

But that's OK, I'll give it to him to read. Just only please let me have it back. Just let it appear when the electricity comes back, just let my words come back onto the screen.

Jamie makes one more call, though she doesn't listen to it carefully. Signs the patient back over to his colleague:

I know she doesn't want to do what we want her to do, and she may be dead by morning, but I think we have to accept that she knows what she wants.

It amazes Miriam from time to time that her husband deals with so many patients who are so liable to drop dead. All these adults with their funky hearts and their many many medicines. Not to mention their blood pressure and their blood sugar. Give me a break. Give me a kid, any day.

He hangs up the phone and comes over to where she is sitting, staring at the candle. He laces his hands into her hair and caresses her head over the general region of the cerebellum. We could forget about the electrician, he suggests. For tonight, I mean. I think I could find the corkscrew in the dark, we know where the wine is. And so, good sport that she is, she offers up one final prayer for her book's well-being, and then joins him in the living room for wine and candlelight and love. (The book, which will of course turn out to be completely unharmed by the electricity loss, will be snapped up by the first publisher who looks at it. Everyone will be bowled over by its stunningly original mix of old romance formulas and up-to-the-minute hospital settings. It will be advertised as the blockbuster novel that could only have been written by a woman doctor, and there will be a photo of her on the back, of course, looking as sleek and glamorous as she possibly can. It will make her a millionaire. It will sell to the movies.)

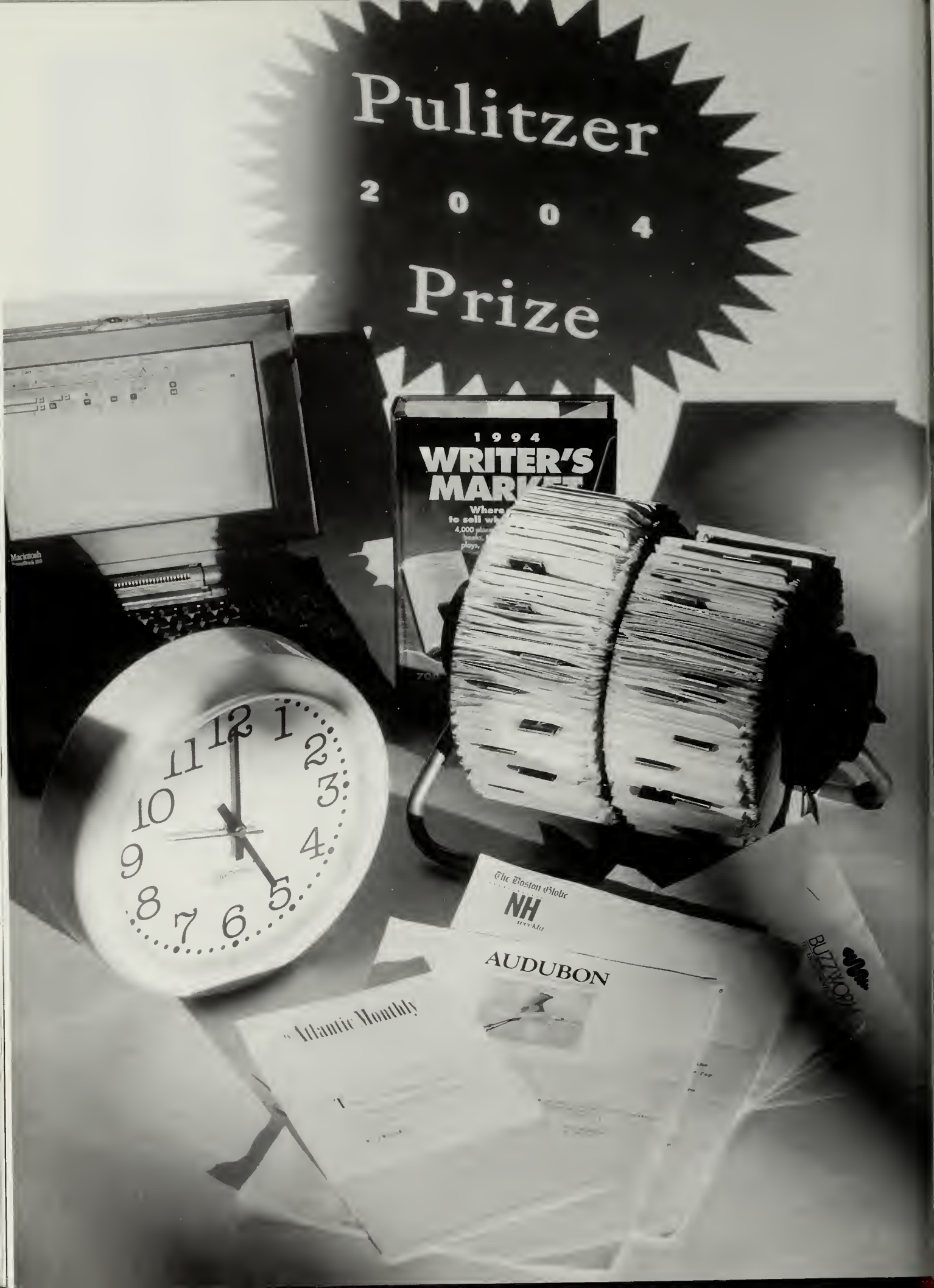
And in fact, the two of them are entwined on the couch, their clothing in some disarray, in the comforting darkness of the house, when suddenly all the lights come on at once, with that special sizzling brightness of new light coming in where there was none. Jamie and Miriam look at each other, enjoying the moment and their own self-consciousness. They go around turning off all the lights, and then scramble on up to their room, but Miriam does stop on the way to see what has become of the computer.

She is sure she can remember awful stories about hard drives erased and memory destroyed. And she has never printed out even part of her book; it has never existed on the page.

Her book is all there, perfectly intact; she has only lost the last couple of paragraphs, which she hadn't saved before the power went off. Before she goes upstairs to her anniversary bed and her husband, she starts the machine printing, and she can hear it rolling in the first piece of paper as she goes upstairs. She will show some of the book at least to Jamie in the morning. (For Jamie, my own true love, without whom...This book is dedicated to my husband, Jamie, with love...)

And she goes up the stairs feeling loved and light of heart, reflecting on various possible worlds and their laws of gravity and momentum.

Perri Klass '86 is a pediatrician at Dorchester House, a neighborhood health center in Boston, and is assistant clinical professor of pediatrics at Boston University School of Medicine, where she is also co-director of an early literacy program called Reach Out and Read. She is the author of five books, including A Not Entirely Benign Procedure: Four Years as a Medical Student *(G.P. Putnam & Sons, 1987) and* Baby Doctor: A Pediatrican's Training *(Random House, 1992); two novels,* Recombinations *(G.P. Putnam & Sons, 1985) and* Other Women's Children *(Random House, 1990), and a book of short stories,* I Am Having an Adventure *(G.P. Putnam & Sons, 1986). She has won four O. Henry Awards for her short stories.*


Pulitzer
2004
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1994
WRITER'S
The Boston Globe
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Atlantic Monthly

The Crichton Syndrome:

From Physician to Writer (and back)

by Victoria McEvoy

ADMIT IT. YOU DID READ *ANDROMEDA Strain*. And you did say to yourself at one time or another, "I could do this." If you read books, no doubt there lurks a wannabe writer under the surface: "If I only had time"; "As soon as the children get older"; "When I finish this grant application"; and so on. I am amazed at the number of people who walk around with half-finished screenplays in their mind. Plots to best-selling novels are polished mentally while dishes are washed or rush-hour traffic is endured. Stinging op-ed pieces are mentally fired off, and poignant short stories are crafted while absent-mindedly listening to a patient's tale. Planning to write, however, and writing are vastly different as this would-be writer discovered.

Harvard Medical School alumni are particularly vulnerable to this syndrome, since HMS boasts quite a few well-regarded writers: Michael Crichton '69, Charles Krauthammer '75, Perri Klass '86 and the late Lewis Thomas '37 are just a few role models. What might propel *you* into the domain of the written word?

Inspiration might come from a variety of sources: a call from an HMO gatekeeper, who has less education than your oldest child, has just informed you that you must discharge the three-week-old infant you admitted for possible sepsis, since IM antibiotics work as well as IV meds; or the grant application that you have toiled over for the last six months has been denied; or you have just seen your 8,679th ear infection; or perhaps you don't mind turning your practice over to Hillary and you are just looking for a creative outlet.

Having decided to write, what kind of writing do you wish to try? Scientific writing does not prepare one for the less formatted world of freelance writing. A book is the goal of most writers, but it may be wise to test the waters first with a shorter work. For whom do you wish to write and about what? The possibilities are endless: magazine articles for the public; freelance articles in medical journals for your colleagues; op-ed pieces for the *New York Times* or the local gazette; investigative journalism for the local paper; poetry or short stories for journals or lay magazines; first-person articles about your own adventures; profiles of personalities, lay or medical. Do you want to write about the medical angle of your subject, or do you wish to get away from medicine entirely?

You now may wish to consider the next question before blithely tapping your way to literary stature on your word processor. How badly do you want to be published or, put bluntly, are you willing to prostitute yourself before the whims of the editors? You have a choice: you can write what you want to and risk oblivion, or you can write what the editor wants you to and your piece may see the light of day.

If you write about medical subjects, you have a much better chance of being published. For example, suppose you are burning with passion about the inappropriateness of U.S. military intervention in Somalia, and you write a pithy, articulate op-ed piece for the *New York Times*. You fax the piece to the editors and then eagerly scan the op-ed pages the next few weeks, alerting friends and families to your upcoming article. Not!

If you are lucky, your piece might have been glanced at by a junior editor before meeting the wastebasket, but the only hope for publication in the *Times*—or any other prominent newspaper—is if a) you are very good friends with A.E. Rosenthal; or b) you have written a succinct piece on a topic for which you are a well-known expert, e.g., you have just returned from Somalia where you were the head of medical operations and you are writing about deteriorating medical conditions

in the field; or c) you are a U.S. senator and you can spew any propaganda you want.

Similarly, it is not easy—if not nearly impossible—to have articles considered for the many lay magazines. I learned that for every magazine that exists, there are a disproportionate number of freelance writers banging on their doors. You may have read a simple article on cholesterol in *Ladies Home Journal* and thought, "I can do that." Most magazines have their own staff—including well-ensconced medical consultants—and accept very few unsolicited manuscripts. These magazines have enormous slush piles of unsolicited articles, where your perfect prose is likely to land. Ideally, you should query an article first, develop a relationship with an editor, allow her (they are almost always female) to edit your article to shreds and with luck, you may see an aborted version of your piece eight months later (if you remember that you wrote the article).

A word about editors. They do not return phone calls. The assistant to the assistant does not return phone calls. If you are lucky enough to get through to an editor, make your call short; they are always on deadline. And no, they have not read your piece but they will get back to you. Persevere! In general, editors are tough and busy and are not charmable. The other reality is that if you are lucky enough to develop a warm, cozy relationship with an editor, she may not be there next week. Editors come and go like hives, so cast a wide net.

This may seem somewhat discouraging, but the most important trait a new writer can have is durability. Don't take no for an answer and don't pout. Does a degree from Harvard Medical School give you an entree with editors? No. You are on an equal footing with all the other would-be poets and journalists, unless you choose to write about your area of medical expertise.

So, why bother? It is enormously gratifying to express a feeling, a point of view, advice or an experience on paper; to craft it into an articulate, perhaps entertaining, written product; and to share your thoughts with untold numbers of people. The best reward for a writer—other than having Jeremy Irons and Meryl Streep star in the screenplay—is the feedback from readers: "I really enjoyed your article"; or "You have a good point, but..."; or "I had the same experience. I'm so glad you wrote that." You have managed to touch someone else through the written word.

A word about humor. It is very hard to write funny articles. What may seem like side-splitting comedy to you may leave your reader, or worse your editor, stonefaced. We are not all comedians, and it takes a special skill to write humor into your pieces without being silly or just not funny.

Other ingredients for your new writing career include

- Time. When are you going to write? At 5:00 AM or during lunch hour (what's that?), in between patients or experiments, or in the evening (guaranteed to endear you to your family). Weekends, of course, are an option, or you can quit your job.
- A laptop computer. This is an essential tool since, no doubt, you are already stretched time-wise, and a laptop allows you to write whenever you can. If you do not know how to use a word processor yet, you will have to humble yourself before your children, spouse or friends and beg and plead for instructions.
- A strong ego. This one should not be hard for HMS graduates.
- Networking skills. Writing the article is the easy part; convincing reluctant editors that your piece is invaluable will require most of your energy. Publishing is an inside business; anyone you know remotely connected to the writing world should instantly become your best friend.
- Establish a resume. The more you are published, the more you get published. If other editors have taken a chance with you, you instantly become more desirable. (This is known as the emperor's new clothes syndrome.)
- Tight writing and writing well. Unless you are writing an elegiac poem, if you can say it in three words, do it. Use anecdotes and descriptions to bring your words to life.

Lastly, a word about money. Repeat after me: "There is no money in writing." Steven Spielberg most likely is not going to buy the movie rights to your story. In other words, don't quit your day job.

Physicians are uniquely qualified to be writers in one very important way: we are experts in deferred gratification. So write on, but remember to enjoy the process. Converting thoughts and feelings into words is a worthy craft.

Victoria McEvoy '75 is a pediatrician on the faculty at HMS. Her articles have appeared in the Boston Globe, Medical Economics, Contemporary Pediatrics, AMA News, *the* Boston Herald *and numerous other publications. She is currently working on a book.*

Unconventional Thoughts on Medical Education

by Melvin Konner

I DO NOT PRACTICE MEDICINE, BUT MY role as an author and teacher has perhaps enabled me to understand some things about the current array of social forces affecting doctors, and the place of the physician in our rapidly changing society. My views are unconventional, and no doubt will be taken only for what they are worth. I see many problems facing American medicine and medical education, and I will not pull any punches.

I taught premedical students for about a decade before going to medical school and have taught them for another decade since. I am not impressed with the old clichés about cutthroat competition; indeed, I am impressed instead with the keen intelligence, strong motivation and high ideals of this subgroup of students. I must say I would never have predicted that in the midst of the worst public dubbing doctors have received in modern times, medical school applications are almost at an all-time high. Indeed, they have shot from a modern low of two per place back to the mid-1970s high of three per place, a decline of 15 years duration reversed in 5 years.

This has occurred in an era when seasoned medical practitioners are, for perhaps the first time in history, urging their children to stay out of medicine. When I have these young people in my office for heart-to-heart talks, as I often do, I always ask them to help me resolve this paradox. They aren't stupid. They read the papers. They see the discouragement of their elders and betters in medicine. Their answer is monotonous: I want to be doctor. Say what you will about economic conditions making business and law less attractive, I see no way to interpret their choices except by reference to an excitement about medicine that is greater than their quite rational fears.

Still even if their dreams are irrational, there is no reason that their preparation should be, and premedical education certainly is. I acknowledge that there must be an intellectual obstacle course to help us select those who are both motivated and talented. But these hurdles should be more than mere games. As elegant as calculus is, as rigorous and interesting as organic chemistry is, we all know that most of what is taught in each of those year-long courses would not be missed in the learning and practice of medicine, including medical research.

A rational premedical curriculum would replace the year of calculus with a year of statistics, research, design and epidemiology in a rigorous introduction directed at health science students. It would collapse the two years of chemistry into one, covering the periodic table, acid-based chemistry, electrochemistry and the main features of organic molecules. A semester of biochemistry should follow. The year of introductory biology should be followed by a semester of genetics and a semester of immunology. The year of physics should be retained, but students should be encouraged to take physics with life-science applications, rather than a general physics the relevance of which must later be explained.

Don't worry about the availability of courses. If the medical school admissions committees build a ballpark consisting of suitable requirements, the relevant college science departments will come. As for the preclinical medical school departments, their old saw about having to teach biochemistry and immunology their own way from the ground up is just so much nonsense. For decades they have taught large numbers of medical students with advanced knowledge of

these subjects. They find ways. Far more important than their priorities is the need to give incoming students some sort of little cloak against the information blizzard of medical school.

I am not convinced that studying the humanities makes for more human physicians, but I do see the value of getting premedical students to focus on what writers of judgment and even genius have had to say about illness. I think the way to do this is to make a list of a hundred or so novels, stories, plays and poems that can be reasonably thought to be worth reading with this purpose in mind. Let premedical students know that these may come up in their medical school admissions interviews.

Some colleges will create courses, or already have, but it would be better to have students develop the habit of reading during their leisure hours. (Yes, I know how few of those there are. Learning to use them well and even to stretch them is a main part of the point here.) A desirable byproduct would be that medical school interviewers might actually read something literary, in some cases a rare event indeed. The ensuing conversations might actually enable interviewers to engage the applicants on a real human level. They might even be able to bring better people into medicine.

Finally, and perhaps most important, there should be a required premedical clinical clerkship, probably during the summer between the junior and senior college years. Students should be assigned for a month or two to primary care settings, preferably underserved ones. They should be evaluated by primary care physicians and by nursing staff, and the criteria should be all of those used in clinical clerkships in medical school, with the important exception of knowledge of medical science.

The assessment in this clerkship should be a key element in the admissions decision. Such a clerkship, I predict, would show results correlated with performance during the clinical years of medical school, as no other measures of undergraduate performance have really done. It would formalize but not, I hope, replace the clinical experiences that many students bring to medical school already. And it would have the additional advantage of setting aside the hoary mythology about assessing "motivation" in the interview setting—something that is no more than a product of physician arrogance by which so many generations of admissions committees have misled themselves.

I now pass from a subject on which I can be considered some sort of expert to one that I know mainly as a consumer: medical school itself. I went to medical school in mid-career, and although I did not intend to write about the experience, a book did assemble itself in my mind a few years later. Francis Moore '38, the eminent Harvard surgeon-scientist, praised it highly in the pages of the *New England Journal of Medicine*; and it was roundly damned by his friend Sherman Mellinkoff, the former dean of the UCLA School of Medicine, in the *Los Angeles Times*. But for the most part, physician-reviewers agreed with Moore. That the book was highly critical of what medical schools were doing was both a tribute to the courage of medical educators who praised it and a sign of the difficulty in changing the training process.

Since 1987, when the critique was published, I have developed views that are both harsher and more forgiving. At that time I believed that all but a few doctors were in it for reasons other than money. I felt that greed, whether for dollars or for academic glory, was a relatively unimportant factor and, above all, that the treatments I was taught in medical school were based on a firm scientific foundation. I have since discovered I was naive.

Pecuniary values have become ever more widespread in medicine, to the point at which physicians may be thought of as almost deprofessionalized, at least in the public's image of them. The quest for scientific glory stirs a kind of acquisitiveness and hubris that is arguably worse, and some of the greatest names in medical science have now been sullied by sustained accusations of misconduct, or at least of failures of supervision and responsibility. Such behavior has weakened the public's high regard for the whole research enterprise. Finally, authorities on outcomes analysis such as John Wennberg and David Eddy, both of whom are physicians and not merely commentators, have persuaded me of an astounding truth: the majority of routinely practiced medical and surgical procedures are not well grounded in medical science—not in the sense of basic science understanding, but in the sense of believable clinical trials. This discovery has disappointed me more than anything I have learned since starting medical school.

On the credit side, I have found that the assault on physicians over the past few years has increasingly made me come to their defense. Lawyers, journalists, economists and, worst of all, bureaucrats have taken it on themselves to make countless judgments for which they have no basis in knowledge, training or experience. I speak to audiences of physicians and find them disheartened and frightened. So, when I speak to audiences of nonphysicians, I remind them that practicing medicine is indeed the hardest job in the world: it requires a duration and intensity of training unknown in any other field; its practitioners are among the most talented people in any society; and they routinely shoulder responsibilities nobody else wants. I tell them that drastic malpractice tort reform is urgently needed, that medical research is grossly underfunded, that alternative medicine is overrated and full of risks, and that medical school should be tuition-free.

But to physicians I must bear different tidings. People are fed up with the increasingly pecuniary ambitions

of too many doctors. They have lost their trust in the good will of physicians, and the result has been an enormous erosion of physicians' control over their lives and work. It is indeed ironic that as physicians have increasingly accepted market values in medicine, insurance companies, hospital corporations and others who really understand money and profits have seized control of the profession and effectively proletarianized doctors. The HMOization of America is a massive historical trend that will continue regardless of what is done this year in Washington, and it is one I believe has already gone too far.

So what to do? This is not the place for my opinions on health reform, which I have made clear elsewhere. One thing that physicians still have control over is medical education. All things considered, I still have a very high regard for the faculties of medical schools. But they really need to stop blowing hot air, as they have been doing for decades, about the changing medical needs of this country—the crisis in primary care, the imbalance between prevention and intervention, the human and humane dimensions of care, and all the other pieties—and start training medical students differently.

None of these widely recognized national needs for change will be filled as long as incentives are as bizarre as they are now. Of course, some of the incentives are outside the control of medical educators, for example, the grotesque maldistribution of incomes within medicine. But surely more can be done.

Medical school faculties have been talking for 25 years about getting more students into primary care, and throughout that time the proportion has been declining. Courses on humanistic medicine have proliferated, and we all know that most medical students view them as a rest from real medicine, or as a joke. And the skills needed to read the journals and evaluate the claims of drug company representatives in this era of rapidly obsolescing medical knowledge are scarcely taught at all, to say nothing of nutritional and other prevention-related sciences.

Medical school, it seems to me, is almost backwards. First-year students should be given a course on taking a medical history and doing a physical as soon as they arrive and then sent out on the wards and into the clinics—including ambulatory care clinics far from the hospital—for six months. They should then return to the classroom for six months of lectures with titles like "Headache," "Abdominal Pain," "Diabetes Mellitus," "Type II," and "Coronary Heart Disease," followed by another six months on the wards. (These are some of the brightest young people in America. Don't tell me they can't function on the wards without first slogging through two years of preclinical sciences. PAs and RNs can; so can they.)

Now they are ready for a year of serious science. Whether it is taught on the science subject plan, on the organ system plan—or some combination of the two—seems to me an interesting but minor question. What is important here is that now we have students who have already had clinical experiences; the science they are taught will crystallize around memories of patients. And they will be hungry for it, keen to understand the experiences they have had.

This science would not be watered down in any way. But it would be, in a new way, meaningful. And it must include a serious block of time for the sciences that medical school continues to slight: epidemiology, statistics, research design, nutrition, exercise and behavioral science. Failure to master these sciences must be made as costly to students as failures in anatomy or pharmacology.

We have 18 months left. A year should be spent in rotations, including more required ambulatory care. And the last six months should be devoted to the luxury of advanced classroom science and/or basic research, specific and relevant to the students' choices and needs.

But turning medical school upside down will not remediate one of its major failures; the inability to turn out humane physicians. I believe there are two key concepts here: socialization and modeling.

Socialization is the term by which anthropologists understand how the young are transformed as they grow into a culture. It is far deeper and subtler than education or training; it is both personal transformation and tuning of the emotions. In medical school, I believe, it is done all wrong.

Doctors pride themselves on what they have been through, and they expect future generations of doctors to go through it as well. They forget that in the bad old days there was little to do for a patient and only a fraction of the knowledge base to master. Much of modern medical education carries with it burdens that can only be seen as brutal. Sure, it toughens students up. But the problem is that brutality cannot and does not breed humanity. It also does not breed a flexible intelligence that can cope with the stunning pace of change in society and in science. This treatment of medical students produces instead a self-protective, selfish set of ambitions, a servile devotion to authority, a loss of ideals and a desire for revenge. Of course, not every student turns out this badly, but obviously a substantial number do. Otherwise we would not have the crisis of confidence that now plagues American medicine.

But the modeling issue, which is crucial to the process of socialization as well, is an even thornier one. As third- and fourth-year medical students are eminently aware, the purpose of their clerkships is to turn them not into doctors but into house officers. They spend two years watching their almost-age-mates being ground through the mill of postgraduate training, and the lesson is not lost on them: survival is job one. They are socialized

into a culture where the language of "hits," "turfs," "mopes" and "gomers" pervades and then replaces the high ideals with which they once dreamed of practicing medicine.

No program of medical ethics courses or physician/patient role-playing can counterbalance years of being socialized into the wrong medical culture under the sway of the wrong models. If we want to turn medical students into doctors, we have to stop insisting that they be taught almost exclusively by house officers. And it wouldn't hurt a bit if we began treating house officers with a modicum of humanity as well.

I believe that American medicine is at a watershed comparable to that faced by Osler, Flexner and their colleagues at the turn of the century. We think we have adapted well to the postwar surge of scientific advances, but actually we have not. We have lost credibility when logic dictates that it should be at an all time high. We have cared too little about communication, prevention and humanity. We have suffered an almost unbelievable surge of lawsuits, a population explosion of nonphysician bureaucrats-cum-monitors, an epidemic of physician discouragement and a dubious, risky flight to alternative healers. Yet, for whatever reasons, we have an almost unprecedented demand among young people for the chance to become a doctor. We owe it to these idealistic, dedicated minds to find ways of training them that will restore their profession to the high place in human affairs that it has had for so much of the past.

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A Small Circle of Stories

When he talks about Tillie Olsen's short story "Tell Me a Riddle," Robert Coles's face wears the expression of one talking about a close friend. He is relaxed, sitting in his office in the lushly mature Adams House. Outside is the noise and bustle of Harvard Square. Inside Coles's sitting room is a quiet encased by dark, polished wood. A bookcase is filled with books jutting in and out at all angles. A print of Edward Hopper's *Nighthawks* hangs on the wall—solitary people sitting in a diner on an empty city street. Coles is talking about literature, about the writers and stories he considers "companions."

Olsen's story centers around two people who have lived together for half a century. Russian Jewish immigrants, they share the same culture, history, race and religion—"all of the variables that when in opposition are supposed to keep people from understanding one another," says Coles. Yet despite their sameness, the couple discovers, as the woman is dying, that they really don't know each other at all.

Coles, professor of psychiatry and medical humanities, teaches Olsen in his course called Literature and Medicine because she grapples with questions of how human beings attempt, with various degrees of success, to communicate. Such a story as this, he says, "makes us ask ourselves whether two people who would seemingly be able to understand each other perfectly do not, then how much can one human being of any background understand another human being of any background."

In "Tell Me a Riddle," for example, the husband listens as his wife, in her pre-death delirium, hums and sings words from songs he's never heard. He asks himself how, after being married for so long, raising children, they are now so far apart.

"Hid it from me," he complained, "how many times you listened to remember it so?" And tried to think when she had first played it, or first begun to silence her few records when he came near—but could reconstruct nothing. There was only this room with its tall hooked pillar and its swarm of sounds.

"The beauty of these stories is that they give you a kind of medium to discuss these issues with the distance that a story provides, while at the same time having the sense of immediacy and passion that the story can generate," says Coles.

For nearly 20 years in the fall, handfuls of medical students, usually no more than 15 each year, have met and sat in a circle with Coles among them to talk about stories or novels written by Olsen, Raymond Carver, Leo Tolstoy, Walker Percy, William Carlos Williams, Flannery O'Connor, Anton Chekov and many others about people from all economic classes caught in all stages of life. They read about people arguing with illness, death and being poor; of physicians who despise and love their patients; of all types of people with hope and hopelessness. And they talk. They talk about the characters, they talk about their own lives, but most importantly they talk about learning to be doctors. There are no exams, no papers, no grades and no attendance is taken. There is conversation and reflection.

"We use these stories as we try to make sense of our own patients' stories," says Nina Livingston '95. "How wonderful it is to understand our own stories and the stories we see in the hospital through the ones we read in class."

Coles views his course as an "interruption of what ordinarily obtains in the medical school experience...an opportunity to pause and allow the mind to reflect morally and spiritually about the meaning of life, including the meaning of medicine."

His students, those who took the course years ago and those who took it more recently, agree. "I remember many things from Dr. Coles's class. First and foremost, the fact that it was a break from the straight science stuff we were being fed endlessly," says Michael Myers '85. "It was a wonderful way to spend an afternoon at HMS."

Amber Barnato '94 is a teaching assistant for an undergraduate version of the course in the Yard. "It's a place where you come and get to know each other and talk about your experiences and talk about medicine."

Reading literature, perhaps especially that somehow describes illness, is a way to see the nonclinical side of disease. "It takes you away from an orientation toward pathology and disease and psychopathology and pushes you toward what you might call the humanity of suffering, the complexity of dying, and the complexity of human relatedness," says Coles.

The body threshed, her hand clung in his. A melody, ghost-thin, hovered on her lips, and like a guilty ghost, the vision of her bent in listening to it, silencing the record instantly he was near. Now, heedless of his presence, she floated the melody on and on. (Olsen)

"In medical school we're confronted with the raw humanity of our patients and of our own. These stories give voice to that," says Livingston.

"Isn't that the great human challenge and the great human dilemma: how might we communicate successfully with one another so we can get to the heart of what's been said?" asks Coles. "That's really the essence of what happens in medicine: a patient explains what he or she is suffering from or worried about and the doctor, one hopes and prays, listens, hears, understands. And if the doctor fails to understand, of course, its a tragedy."

She stood in her coat for a minute trying to recall the doc-

tor's exact words, looking for any nuances, any hint of something behind his words other than what he had said. She tried to remember if his expression had changed any when he bent over to examine the child. She remembered the way his features had composed themselves as he rolled back the child's eyelids and then listened to his breathing. (Carver)

While there's plenty of medicine in medical education, there's nowhere to learn about one's culpability and fear that a patient will die; there's no course that teaches how to avoid, as Barnato says, becoming hard-nosed and jaded on the wards; there's no lecture on how to incorporate your own sense of the world when faced with someone's very different life experiences. These students found some of those things in Coles's class, and through reading the stories.

"It was a time to share interesting thoughts with a special person—sort of a form of group therapy," says David Roberts '95. "We mixed passages from the books with day-to-day experiences of being a medical student."

"As a group of medical students, we all are invested in a set of ideals of what medicine can be. William Carlos Williams points out that even at times a physician can be racist and even caustic toward his patients," says Barnato.

He was one of these fresh Jewish types you want to kill at sight, the presuming poor whose looks change the minute cash is mentioned. But they're insistent, trying to force attention, taking advantage of good nature at the first crack. You come when I call you, that type. He got me into a bad mood before he opened his mouth just by the half smiling half insolent look in his eyes, a small stoutish individual in a greasy black suit, a man in his middle twenties I should imagine. (Williams)

"There's a glitch in the brain where you find a sexist thought and catch it when it happens; but you realize you shouldn't beat yourself up about it," Barnato continues.

"No one will teach you that you're going to hate patients, or fall in love with a patient; but maybe you can read about it," says Roberts.

Coles has a fantasy of reforming medical eduaction to incorporate literature. He also envisions training medical students to write "more clearly and vigorously," believing that learning to write well trains the mind to observe and analyze with more clarity: "In a sense all doctors are writers because they're constantly writing case histories; they're writing stories about their patients.... They're constantly observing, listening and then trying, in a narrative form, to do justice to what they've seen and heard."

That's the probable explanation for her legs, I told the husband. She must have been a little girl during the war over there. A kid of maybe five or six years I should imagine. Is that right, I asked her. But she didn't answer me...So that's it, I thought to myself looking at her fussing...paying no attention whatever to me. No wonder she's built the way she is, considering what she must have been through in that invaded territory. (Williams)

The lessons learned through literature are those necessarily not just for practicing medicine, but for living a life. "This class started me reading again," says Livingston. "Before, I thought of reading novels as separate from my medical education, and in fact even that they might hinder it by taking time away from my medical texts. But by my second year, I realized these stories had everything to do with my medical education."

Coles recounts a conversation he had several years ago with Lewis Thomas when they were together at a meeting in Cincinnati. They talked about the essential place literature had in their lives. "It was a memorable moment as we shared our reactions to some of the Williams stories; we remembered together the first experiences we had with Tolstoy, Eliot, Dostoyevsky, Hardy and Dickens. I'll never forget it."

Terri L. Rutter